

DOCTOR OF BUSINESS (DBA)

Tacit knowledge sharing at Higher Education Institutions and its impact on the creation of competitive niches.

Holzer Geromin, Martina

Award date:
2015

Awarding institution:
University of Bath

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Tacit knowledge sharing at Higher Education Institutions and its impact on the creation of new competitive niches

Martina Holzer Geromin

A thesis submitted for the degree of Doctor in Business Administration
in Higher Education Management (DBAHM)

University of Bath
School of Management

April 2015

COPYRIGHT

Attention is drawn to the fact that copyright of this thesis rests with the author. A copy of this thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with the author and that they must not copy it or use material from it except as permitted by law or with the consent of the author.

Contents

Acknowledgements	7
1. Introduction	9
1.1 Why is this reflection on knowledge relevant for this study on ‘Tacit knowledge sharing at HEIs and its impact on the creation of competitive niches?’	9
1.2 What did I want to study?	10
1.3 What theoretical framework is the study based upon?	11
1.4 The structure of the thesis	13
2. Literature Review: Knowledge - the core element of higher education institutions	16
2.1 Knowledge - What is it?	17
2.1.a) A positivistic/cognitive definition of knowledge	18
2.1.b) A constructivist view of knowledge	19
2.2 Determining variables shaping knowledge	24
2.2.a) The essence of all knowledge: absolute knowledge	24
2.2.b) The individual components shaping knowledge	27
2.2.c) The collective components shaping knowledge	30
2.2.d) The tacit dimension of knowledge	32
2.3 Nonaka & Takeuchi’s theoretical framework on knowledge creating companies	35
2.4 Can Nonaka & Takeuchi’s model be transferred to HEIs?	38
2.5 What can HEIs learn from Nonaka and Takeuchi’s theoretical framework in order to enhance tacit knowledge sharing practices?	39
2.6 The concept of ‘ba’ which facilitates tacit knowledge sharing with the aim of creating new competitive niches at HEIs	43
2.6.1 Where does the concept of ‘ba’ come from?	44
2.6.2. In which elements is ‘ba’ grounded?	45
3. Research Questions	50
3.1 The study’s sub-research questions	51

4.	The Research Context	53
4.1	The Higher Education Context	53
4.1.a)	The purpose of Higher Education Institutions	55
4.1.b)	The creation of competitive niches	56
4.2	The concrete study of research: The Free University of Bozen/Bolzano	57
4.2.a)	Historical Background	58
4.2.b)	Legal and economic considerations	60
4.2.b)i	The trilingualism	62
4.2.b)ii	Interculturalism	63
4.2.c)	Institutional considerations with a special focus on knowledge-sharing aspects	65
4.2.d)	Organizational considerations	72
4.2.e)	Departmental aspects	77
4.2.e)i	The Faculty of Education	77
4.2.e)ii	The Faculty of Economics and Management	78
4.2.e)iii	The Faculty of Design and Art	80
4.2.e)iv	The Faculty of Computer Sciences	81
4.2.e)v	The Faculty of Sciences and Technology	82
4.2.f)	Conclusive considerations	83
5.	Research Design and Methods	84
5.1	Philosophical considerations	85
5.2	Ethical considerations	87
5.3	Reflections on my role as a qualitative researcher	90
5.4	The empirical study	93
5.4.a)	Research questions, sub-research questions and leading interview questions	93
5.4.b)	Case study organization	95
5.4.c)	Research participants	97
5.4.d)	Research methods	101
5.4.e)	Data analysis	104
5.5	Conclusion	106

6.	Findings and Discussion	107
6.1	What does tacit knowledge sharing mean in this organizational context?	109
6.1.1	Definition of tacit knowledge sharing of co-workers	109
6.1.1.a)	Tacit knowledge sharing is constructed	110
6.1.1.b)	Tacit knowledge is unlimited	111
6.1.1.c)	Tacit knowledge sharing is personal	112
6.1.1.d)	Tacit knowledge sharing is culturally embedded	113
6.1.1.e)	Tacit knowledge sharing is fluid	114
6.1.2.	The perceived value of tacit knowledge sharing at the institution	116
6.1.2.a)	Knowledge sharing is empowering	116
6.1.2.b)	Knowledge sharing raises awareness	117
6.1.2.c)	Knowledge sharing encourages consensus-building	117
6.1.3	The institutional culture with regards to tacit knowledge- sharing practices (ba)	119
6.1.3.a)	Lack of shared institutional culture	119
6.1.3.b)	Communication constraints	120
6.1.3.c)	The institutional vision requires more clarity	122
6.1.3.d)	Unclear about the institution's status	123
6.2	What are the barriers and enablers of tacit knowledge sharing?	124
6.2.1	Barriers	125
6.2.1.a)	The 'they-we' perception	125
6.2.1.b)	Unclear commonly shared vision and objectives	128
6.2.1.c)	A lack of commonly shared institutional culture (ba)	130
6.2.1.d)	The physical separation between the central administration and the faculty administration and academia	131
6.2.1.e)	The rigid bureaucratic pillar	132
6.2.1.f)	Time constraints	134
6.2.1.g)	Internal competition	135
6.2.1.h)	Communication constraints	136
6.2.2	Enablers	137
6.2.2.a)	Acknowledgement of the value of the tacit dimension	137
6.2.2.b)	A clear vision with commonly shared objectives	138
6.2.2.c)	A shared institutional culture	139
6.2.2.d)	An organizational structure based on cross-role, cross-	

departmental and trans-disciplinary collaboration	142
6.2.2.di) The creation of interdisciplinary Communities of Practice	143
6.2.2.e) The creation of time	145
6.2.2.f) The decentralization and decrease of bureaucracy	146
6.2.2.g) The size	146
6.3 What are the characteristics of the environment by which competitive niches are created?	147
6.3.a) A culture of care	150
6.3.b) A clear institutional vision	152
6.3.c) The celebration of the social nature of the organization	153
6.3.d) A culture of trust and openness	154
6.3.e) A culture that nurtures innovation and entrepreneurship	156
6.3.f) A culture based on intellectual excellence	157
6.3.g) An emphasis on infrastructure, size and resources	158
6.3.h) A culture which gives space to knowledge-activists	159
7. Contributions and Recommendations	161
7.1 Theoretical contributions	161
7.1.a) A holistic knowledge concept	161
7.1.b) The value of human capital as unique source for competitive advantage	162
7.1.c) The SECI model redesigned	163
7.1.d) The socialization quadrant in the HE context	166
7.2 Recommendations	168
7.2.a) Some practical suggestions for the Free University of Bolzano-Bozen	168
7.2.b) Possible implementation challenges at FUB	170
7.3 How can a knowledge-enabling ‘ba’ as outlined in chapter 6.3 be made possible?	172
8. Conclusion	174
8.1 The purpose of HEIs	175
8.2 The importance of human capital	176
8.3 The importance of tacit knowledge sharing	176
8.4 The creation of competitive niches	177

8.5	Suggestions for further research	178
8.6	Final remarks	179
Bibliography		180
Appendix I (Findings - original language)		193
Appendix II (Statute of the Free University of Bozen/Bolzano)		201
Appendix III (Three Years' Plan of FUB 2014-2016)		236

Acknowledgements

In my view, every single human being has an innate desire to know more. As such I have always been driven by the thirst to dig deeper, to ask questions, to find out about the world I live in, to go beyond the so called surface, to try out, to risk and to keep an open mind.

Knowledge creation is based on learning - lifelong learning - because knowledge gets constructed gradually. I am grateful for this process.

First and foremost, I am grateful to my father who always had the dictionary ready to find out more about any questions arising during my studies. His way of looking at the universe, of telling me personal stories, such as how he was able to overcome his homesickness during the Second World War by reading the sky at night time, have made me understand that there is infinite knowledge out there and that it makes sense to keep an open mind because, by doing so, a confusing chaos may result in the outcome of a clear picture, eventually.

I am grateful to Prof. Rajani Naidoo who, although I did not work at higher education level when I applied to undergo this journey of discovery, gave me access to the DBAHEM anyway. I am grateful to all the wonderful lecturers and colleagues I encountered throughout these last four years of study; especially to Michael Barrett who motivated me to continue in moments of crisis.

However, one figure stood out: Prof. Juani Swart, whose lecture inspired me in such a way that - while following her presentation - it felt as if clarity had emerged: I was meant to be here because this was my area of research: tacit knowledge sharing - a field which has always been one of my strongest fields of interest.

Furthermore, I am grateful to Prof. Nick Kinnie, my second supervisor, who made himself available for discussions whether over the phone or in person and whose words of encouragement, such as ‘this is a solid thesis which made me reflect more’, meant a lot to me.

My gratitude also goes to the Rector, the President and one of the Board Members of the FUB (Free University of Bozen-Bolzano) who were immediately willing to facilitate the empirical study by putting me in contact with their deans and professional managers. Each single participant left a strong impact on me. I felt it was a privilege to listen to them and to conduct some constructive debates during the focus group discussion. The Rector’s personal assistant was the key figure through whom I organized meetings with the respective players of the organization. Her contribution was essential.

Finally, I would not have completed the DBA without the continuous support of my closest family members: my husband Marco and my son Emanuel. Their understanding and their willingness to share their tacit knowledge with me kept me on track and motivated me to look for hidden new knowledge: the sparkle of discovery. And to my mother for having transferred to me important tacit skills such as determination, perseverance and resilience.

Thank you, indeed.

1. Introduction

The journey of this thesis had started very early in my life. It may sound strange, but I'd rather have seen it started when I was a child: when my thirst for knowing and uncovering the hidden emerged more and more. There was always something in me which told me that there must be more than what I can see and what I can express in words. What I see or what I can say seems only a layer of the whole - a fraction of the absolute which is already there and which may come to the surface in glimpses of insight; in moments of connection with the whole. Eckart Tolle's words reflect best what I mean:

'Words, no matter whether they are vocalized and made into sounds or remain unspoken as thoughts, can cast an almost hypnotic spell upon you. You easily lose yourself in them, become hypnotized into implicitly believing that when you have attached a word to something, you know what it is. The fact is: You don't know what it is. You have only covered up the mystery with a label. Everything, a bird, a tree, even a simple stone, and certainly a human being, is ultimately unknowable. This is because it has unfathomable depth. All we can perceive, experience, think about, is the surface layer of reality, less than the tip of an iceberg.' (Tolle 2005:25)

However, the unfathomable depth is already there - it is implicit in reality, in each mineral, vegetable, animal and human - and it may come to the surface, as it will be mentioned in this thesis, in moments of insight, in moments of creative imagination, in moments of dreaming. It seems to be there at a subconscious level which belongs to every human being. It is part of the person's tacit dimension as Polanyi (1958; 1976; 2009) calls it. Albert Einstein - probably for this reason - stated that imagination is more important than knowledge as, according to him, through imagination one may be able to dig deeper, to find out more about the world we live in, to go beyond the surface by trying out, by taking risks and by keeping an open mind for the hidden to be unravelled.

1.1 Why is this reflection on knowledge relevant for this study on 'Tacit knowledge sharing at Higher Education Institutions and its impact on the creation of competitive niches?'

It is relevant as the knowledge concept above seems to be a different knowledge concept from what I personally experienced as a university lecturer since, especially after the European movement towards the implementation of standardized academic offerings initiated by, what is called the Bologna process, those offerings received a touch of standardized structure mainly based on the use of explicit knowledge in textbooks, articles and essays. Hence, teaching, learning and research seem

to be seen through the lens of a notion-oriented approach rather than through an inquiry-oriented approach (Schwanitz 2002, Barber et al 2013). Therefore, I was driven by the idea to explore whether there are other models at higher education (HE) level; which might be similar models to the International Baccalaureate (IB) - from primary school up to secondary school - which embed their mission in their teaching and learning: ‘to develop inquiring, knowledgeable and caring young people who help create a better and more peaceful world through intercultural understanding and respect’ These programmes (for Primary School – PYP , for Middle School – MYP, and for upper Secondary School – DP) ‘encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right’ (<http://www.ibo.org/en/about-the-ib/mission>). This indicates that the IB model pursues another knowledge and learning concept: an inquiry-based knowledge concept which gives space to a holistic knowledge concept. Through having worked myself in an IB-setting in the capacity of the Principal of an International School and through having come across HE initiatives which put their focus on tacit knowledge sharing practices, such as the start-up projects offered by Stanford University – to mention one example – where students learn alongside lecturers and business people through ‘learning by doing’ or ‘designing and building’ approaches based on the use of the respective individuals’ embedded, tacit knowledge within the team, it appeared to me that it made sense for HEIs to reflect on how they view knowledge: whether from a positivistic or from a more holistic perspective and this will be analyzed in this study.

1.2 What did I want to study?

In addition to what impact the view on knowledge may have on HEIs I wanted to find out whether such institutions understand the position they find themselves in today’s learning society considering that the expectations towards learning have shifted towards lifelong learning offerings which would prepare its citizens for an ever changing reality by making them ready to ‘take personal responsibility both for themselves and the world around them’ As such, ‘every citizen is a potential student and a potential creator of employment’ (Barber et al 2013:5) and of new ideas which may lead to the creation of new competitive products and/or services. Questions such as: Does a focus on tacit knowledge sharing at HE level help the institution gain competitive advantage over other players? Does the notion of lifelong learning induce HEIs to design more revolutionary, cross-disciplinary, cutting-edge programmes where the tacit, embedded knowledge of both academic and professional managers would be used in making this happen? Do HEIs see the huge opportunity they have by seeing themselves as attractive knowledge providers and knowledge tanks for the entire community? Do universities therefore need to be clear which niches or market

segments they want to serve and how by looking at what potential may lie in the value of tacit knowledge and its use?

Questions like these were meant to help me find out how HEIs may be able to respond to the demands and pressure they are facing in today's reality such as the massification of student intake, internationalisation, globalization, cuts in financial resources, the increased competitive market between and beyond university level, the emergence of digital learning opportunities as well as changes in how universities have to be managed (Naidoo & Jamieson 2007): all these have put additional demands and further pressure on the university as an institution and, as such, also on all professionals working at this level (Bacon, 2009; Baldwin, 2009; Barber et al 2013; Gioia 1996; Henkel 2005; Longworth 2010, McInnis 1998; Shattock 2003; Whitchurch 2008). Hence, I wanted to explore whether HEIs may want to consider being ready for a transformational shift towards more holistic, trans-disciplinary, cross-departmental, cross-organizational and more creative models of academic offerings so that they might evolve into successful knowledge-producing and knowledge-transferring enterprises that can respond to their competitive globalized world by focusing intelligently on their unique selling proposition, their distinctive nature among others (Barber et al 2013; Shattock 2003).

Would it, therefore, make sense to put a special emphasis on the power of tacit knowledge transfer across all ontological levels in order for competitive niches to emerge? What does tacit knowledge sharing at HEIs look like with regards to the creation of new competitive niches? What does a knowledge-enabling environment look like where both the individual and the collective elements for knowledge transfer and its creation are nurtured and what impact would a sound collaboration between both academic and professional managers at senior management level have on the creation of new knowledge? (Bacon 2009; Whitchurch 2004, 2008). To find some answers to such questions would mean that they could be applied and used by other HEIs for strategic planning and decision-making purposes. This would help create a position of competitive advantage over other players in the field.

1.3 What theoretical framework is the study based upon?

I based my study on the theoretical framework of Nonaka & Takeuchi's SECI model of knowledge creation (1995) where, according to the authors, the knowledge-sharing takes place in four modes: socialization, externalization, combination and internalization. I decided the main focus of my

thesis to be the socialization dimension; hence, the face-to-face communication between co-workers and their shared experiences and skills - the 'tacit to tacit' knowledge-sharing; the interaction between the different co-workers in the socialization process. I wanted to learn what the real power for competitiveness would be considering that, only by dwelling in a subject, situation and/or reality, hence, by experiencing reflectively the given context first hand, one can make sense of the formal/explicit knowledge. As such I was intrigued to find out how tacit knowledge of the respective co-workers may be facilitated to flow in order to be successful among many others. Therefore, it appeared that a special emphasis had to be given to the importance of the properties of the socialization space. Although each quadrant seems to be important I wanted to find out where the basis for tacit knowledge sharing may be seen. By studying the literature I found that there was not enough empirical work to gain sufficient insight from, and that is why I felt intrigued to start to fill this gap (Ambrosini & Bowman 2001; Swart 2006, 2011). This notion induced me to start from scratch in order to get some answers about the potential value of tacit knowledge sharing for the individual, the institution and the society as a whole. Would the value of human capital, eventually, have an impact on the transformational shift HEIs may want to consider: a bold and courageous shift by aiming for long-term outputs (Ambrosini & Bowman 2001/2008; Barber et al 2013; Parker 2014)?

It was, therefore, the aim of this study to find out whether HEIs should view the tacitness of their co-workers accordingly as, perhaps, it is right there where competitiveness of learning organizations, such as HEIs, may come from. Since, especially, in many Western countries HEIs base their curricular on the use of explicit knowledge such as textbooks, articles, academic writings (Schwanitz 2002), I aimed to find out what role the tacit knowledge transfer may play in the creation of new knowledge. That is why this research may be of important relevance as it tries to highlight that right there, in the hidden, embedded, personal knowledge of each co-worker and its reflective sharing with others the unique essence of an institution may come to the surface by leading to a knowledge creation based on both an individual and a social construction (Oztok 2012; Lave/Wenger 1991; Stone 2013; Leistner 2010) as well as on a holistic knowledge view. Does it, therefore, make sense for an HEI to invest in the creation of a knowledge-enabling environment and in human capital for competitive niches to emerge (Ambrosini 2009; Ambrosini & Bowman 2001/2008/2009; Bowman & Ambrosini 2003/2007; Bowman & Swart 2007; Bowman & Toms 2010; Kinnie & Swart 2012; Swart 2008/2011)?

Driven by the insight that tacit knowledge may have a distinctive power among others and as such it may be the core element for an HEI to be successful I was motivated by the question: How tacit

knowledge sharing creates new competitive niches and what needs to be done in order for such knowledge to flow?

1.4 The structure of the thesis

In order to lead the reader gradually through the journey of discovery I structured the thesis as follows:

Chapter one sets the introductory grounding of the thesis topic ‘Tacit knowledge sharing at HEIs and its impact on the creation of competitive niches’ by outlining clearly what the study is all about and how relevant this may be for strategic decision-taking at institutional level.

In chapter two I analyze the concept of knowledge and the components through which both the individual and the collective knowledge construction are determined. A closer look at Polanyi’s concept of tacit knowledge aims to confirm the hypothesis that by nurturing the flow of the respective individual tacit knowledge an institution’s intellectual capital may result in a stronger competitiveness among others.

In chapter three I present the leading research question and the respective sub-research questions which helped give the empirical study its clear focus: an analysis on how 'Know- How' may come 'in'-to 'Action' (Swart 2011), how such 'Know-How flow' may create competitive niches at HEIs and by investigating on which elements a knowledge-enabling environment may be grounded in (Stone 2013; Polanyi & Prosch 1976; Reichert 2006; Leistner 2010).

In chapter four I first address the larger HE context by exploring in which market situation HEIs find themselves in in today’s continuously changing environment based on increasing demands and expectations by the respective stakeholders, and by reflecting on the purpose of HEIs. I further discuss what competitive niches are and how they may be created by giving a special emphasis on the flow of tacit knowledge and the importance of the socialization mode in order to create an institutional knowledge-enabling culture which seems to be the basis for new competitive niches to emerge. Furthermore, I give an in-depth overview about the context-specific field study: the Free University of Bozen-Bolzano by focusing on historical, legal and economic, institutional, organizational and departmental aspects of the specific reality.

In chapter five I outline the research design and the methodology used and explain why I have decided to use qualitative data gathering only, why I chose the Free University of Bozen-Bolzano to

be the exploratory case study and what the limitations of the study from a philosophical, legal and ethical point of view may be.

In chapter six I reflect on the findings by discussing them in detail. The chapter has been divided into three sub-research questions: ‘What does tacit knowledge mean in the organizational context?’, ‘What are the barriers and the enablers for tacit knowledge-sharing?’, and ‘What are the characteristics of the environment through which competitive niches are created?’. This structure helped extract data in such a way that satisfactory answers to the research question could be identified: Competitive niches can be created at HEIs if there is a clear understanding among all co-workers that tacit knowledge is probably the most important treasure an institution owns, and by facilitating the establishment of a ‘ba’, a knowledge-enabling culture, where knowledge-workers are encouraged to share their own hidden knowledge in order for new knowledge to be built upon. Such a culture is based on the notion of constructivism where new ideas may result in new products through the use of purposeful knowledge-enabling routines, practices and processes such as mental models, focus group discussions, shadowing, formal and informal meetings and so forth. The determining characteristics for such a ‘ba’ have been outlined and they may also be applied to other settings. Socialization may be embedded in the tacit dimension which - in moments of creative insight and/or imagination - seems to be the doorway to the absolute knowledge where things do not appear to be disconnected anymore, where glimpses of clarity arise and the sense of becoming motivates co-workers to pursue an idea until the objective will be reached: a new competitive niche which may result in an impact on themselves, on the institution and on society as a whole (Anchor 2010; Palmer et al 2010).

In chapter seven I outline what needs to be done in order to establish a knowledge-enabling environment by presenting the study’s theoretical contribution as well as by listing practical recommendations, as well as by mentioning possible practical implementation challenges. Finally, I bring the research to an end by highlighting that, since tacit knowledge in itself is not easily measurable, researchers and scholars may want to study this field through soft methods in order to find similarities and differences between different institutions. However, due to the uniqueness of each individual’s tacit knowledge and the collective construction, a view of seeing the efforts of all co-workers who are embedded in the whole where each person and each group may have their place may be the final outcome of my study. Such a view may invite HEIs to make a quantum leap – away from traditional and standardized models towards more creative and inquiry-based approaches to learning where the tacit dimension gets its deserved attention (Barber et al 2013). HEIs may integrate the stark value of the individual tacit knowledge into the co-workers’ being and their

appreciation of tacit knowledge sharing practices as this may lead to an enlightened attitude which could be called the new consciousness: ‘...the recognition of the unawakened you, the ego as it thinks, speaks, and acts, as well as the recognition of the collectively conditioned mental processes that perpetuate the unawakened state’ (Tolle 2005:7). By doing so, unfathomable things may emerge: competitive niches which take the institution beyond mediocre existence.

In chapter eight I reflect on the undertaken journey of study by looking back on the core topics: knowledge concept, the purpose of HEIs, the importance of tacit knowledge sharing, the importance of human capital, the creation of competitive niches as well as by giving some suggestions for the need and the potential modalities for further research.

This journey of discovery has changed me as a person and as a professional. Furthermore, I realized more than before that knowledge is a never-ending process; that, after each new discovery, new questions arise and, only by doing both - working on our own individual knowledge as well as on the collective knowledge - the hidden dimension may appear and result in something new.

2. Literature Review: Knowledge - The Core Element of Higher Education Institutions

Teaching, learning and research are the key driving forces of higher education institutions and, as such, they are embedded in their mission statements (Gioia 1996; Palmer et al 2010; Brewer & Brewer 2010; Whitchurch 2008; Henkel 2005). Their core essence is the creation, the communication and the transfer of knowledge at various levels as HEIs can be seen as learning organizations or, as Brewer & Brewer (2010) argue, as ‘knowledge-based organizations’ which are involved in the process of developing knowledge workers in different fields. In a continuous changing world and in an increasingly competitive market it seems that companies or institutions are mainly dependent on the quality of their knowledge possession, transfer and creation. That’s why it seems that a special emphasis must be given to the creation of an environment which nourishes the flow of knowledge, and, as I shall analyze in my study, in the flow of tacit knowledge in particular (Stone 2013; Oztok 2012; Davenport & Prusak 2000; Nonaka & Takeuchi 1995; Glisby & Holden 2011; Leistner 2010; Pasher & Ronen 2011; von Krogh et al 2000). Indeed, the creation of a tacit knowledge-enabling environment might be seen as the main and most indispensable element of having a competitive advantage (Davenport & Prusak 2000; Nonaka & Takeuchi 1995; Swart 2008).

In the literature review I will start with an in-depth reflection on knowledge and individual and collective components shaping knowledge in general, and then move to a closer study of the tacit dimension of knowledge. I will further investigate Nonaka and Takeuchi’s (1995) work on knowledge sharing in Japanese knowledge creating companies and their analysis of its positive impact on the creation, the transfer and the successful application of new knowledge. Their concept of qualitative knowledge-sharing shall function as a theoretical framework for this thesis – especially the aspect of socialization through the creation of ‘ba’ (a tacit knowledge-enabling space which may be seen as a necessity for higher education institutions) – as I try to find out whether their suggestions can be transferred to an HEI setting, by focusing on the collaboration of academic and professional managers and on other factors which enhance tacit knowledge-sharing in general (Whitchurch 2004, 2006, 2008; Henkel 2000, 2005; Bacon 2009; Swart 2006, 2008, 2011). Furthermore I will try to reflect on whether, and how, the emphasis on ‘ba’ may lead to the creation of new competitive niches at higher education level (Stone 2013; Glisby & Holden 2011; Reichert 2006; Oztok 2012).

2.1. Knowledge - What is it?

‘He who knows nothing, loves nothing. He who can do nothing understands nothing. He who understands nothing is worthless. But he who understands also loves, notices, sees ... The more knowledge is inherent in a thing, the greater the love.... Anyone who imagines that all fruits ripen at the same time as the strawberries knows nothing about grapes.’ (Paracelsus)

‘I was born not knowing and have only had a little time to change that here and there.’ (Richard Feynman)

‘The greatest obstacle to progress is not the absence of knowledge but the illusion of knowledge.’ (Daniel Boorstin)

‘To know that you do not know is the best. To pretend to know when you do not know is a disease.’ (Lao-Tzu)

A reflection on the afore-mentioned quotes may lead the reader to the understanding that knowledge is something outside of a human being’s reach. Knowledge seems to be dependent on a variety of factors. Researchers, philosophers and a variety of authors (Capra 1984; Schwanitz 2002; van de Lagemaat 2008; von Krogh et al 2000; Reichert 2006; Wenger, 2008; Swart, 2002; Davenport & Prusak 2000; Dalai Lama 2005; Lipton 2008) seem to see it as an open-ended entity which invites the seeker to always look for more, and then the more s/he will know. Knowledge seems to be connected with the past, the present and the future; with the here and the there; with people, with social interactions and with the way the individual her/himself interprets the reality s/he encounters (Leistner 2010).

Before moving into the area of tacit knowledge transfer it seems, therefore, to be of vital importance to understand the concept of knowledge. This is particularly true given that, in the past six or seven decades, the focus has shifted from a product-oriented society to a knowledge-oriented one and a knowledge-based economy as well (Bertels & Savage 1998; Davenport & Prusak 2000; Palmer et al 2010). Questions such as: ‘What is knowledge all about?’, ‘Is there a clear concept of knowledge?’, ‘Do different people agree on a common definition or is the way knowledge is interpreted dependent on a variety of diverse factors as mentioned above?’, may lead us towards a better understanding of knowledge.

By reading literature in the knowledge field it seems that there is no common, clear-cut definition of knowledge. However, all authors and academics seem to agree that ‘knowledge’ is developing over time (van de Lagemaat 2008; von Krogh et al 2000; Nonaka & Takeuchi 1995; Davenport & Prusak 2000; Akehurst & al 2011; Denning 2013; Kofman & Senge 1994; Leistner 2010; Rynes et al 2001; Lave & Wenger 1991; Reichert 2006; Capra 1984; Lipton 2008), and that knowledge is not a static concept. We may want to distinguish between two major views of knowledge theory: the positivistic/cognitive view of knowledge and the constructivist theory of knowledge-building (Schwanitz 2002).

2.1.a) A positivistic/cognitive definition of knowledge

The pure ‘cognitive’ idea of knowledge lies in the accumulation of notions: accordingly, educational systems applying this approach (such as the Italian and German educational system) have based their school and university curricula on a notion-based concept of teaching and learning (Schwanitz 2002; Leistner 2010; van del Lagemaat 2008). This seems to emphasize the importance of data-gathering in order to be able to replicate and apply the learned information in a given situation. Such understanding of knowledge may lead to a perception of fragmentation as, from early childhood onwards, human beings learn that ‘knowledge is accumulated bits of information and that learning has little to do with our capacity for effective action, our sense of self, and how we exist in our world’ (Kofman & Senge 1994: 6). According to Wenger, ‘information for its own sake is meaningless’ (1998: 273).

This discussion leads us to the distinction between data, information and knowledge. Davenport/Prusak (2000) argue that data ‘is a set of discrete, objective facts about events’...‘the data tells nothing about the why’ (2000:2), while information itself is seen to be a message dependent on whether the sender or the receiver add meaning. According to the Oxford English Dictionary, data are ‘facts and statistics collected together for reference or analysis’, while information may be defined as an organized data collection; organized by someone (a person) or by a computer (through software programme). Knowing many facts might be useful for a person to be successful in a test situation which is based on notion-based data or in a quiz situation where the person needs to recall detailed data in order to win the competition. However, knowing many facts does not mean that a person has integrated their learning into a bigger picture; it does not mean that the learner/knower understands how the various parts are linked and how they form a meaningful whole (van de Lagemaat 2008). To use an analogy, ‘information is to knowledge as bricks are to a building’ (van de Lagemaat 2008: 30), and facts may be seen as the atoms of those bricks.

I find myself agreeing with Leistner (2010) who argues that, when information gets interpreted and a receiver adds meaning to information, it translates automatically into knowledge because ‘knowledge is actually connected to people, it cannot be managed outside of people’s heads. It exists only in the context of prior human experience.... knowledge is actually tacit by nature... but still, once it is outside of people’s heads, it is mere information, not knowledge anymore’ (2000: 7-8). Information undergoes a change when it becomes knowledge, because each individual interprets the information according to his/her unique ‘framework and ... context of prior knowledge and experience’ (Leistner 2000:9) that s/he brings to the situation. The positivistic/cognitive view of knowledge seems to be based on the idea of seeing the detail rather than the interconnected whole (Lipton 2002). Friedrich Nietzsche phrased it in the following way: ‘What is the mark of every...decadence? That life no longer resides in the whole. The word becomes sovereign and leaps out of the sentence, the sentence reaches out and obscures the meaning of the page, and the page comes to life at the expense of the whole – the whole is no longer a whole.’ (in Kofman & Senge 1994: 1). The positivistic view of knowledge seems to emphasize the intellectual quantification of knowledge; it seems to be based on a rationalistic view of knowledge which compares the information we gather with the person’s own past experiences and future expectations; however, it is more oriented, as Nietzsche phrased it, towards a focus on the different parts instead of seeing the different parts being connected with the whole. According to the physicist Fritjof Capra (1984), rationalistic knowledge belongs to the reign of the intellect which functions in terms of dividing, comparing, categorizing and measuring. It allows a person to build mental maps of what has been, of what is and what might be in the future. The positivistic view of knowledge sees ‘the world as an independent reality’ which seems to categorise it as a ‘colourless, soundless, odourless realm of atoms whizzing around in empty space’ (van de Lagemaat 2008: 100).

2.1.b) **A constructivist view of knowledge**

The cognitive/positivistic definition of knowledge seems to be based on the understanding that knowledge is conceptualized and interpreted through comparison, categorization and measurement. However, the idea of quantifying knowledge in such a way seems to underestimate both the social and the individual component in the process of knowledge construction. This leads us to the constructivist view of knowledge, which is dependent on how an individual and/or a group uses the acquired information and builds upon existing knowledge. From a constructivist point of view, knowledge is tied to the person; knowledge is unique, flexible, and a process in itself; it is about giving value to one’s own experience and attributing meaning to it (Kinnie & Swart 2010; Swart 2006). Nonaka & Takeuchi define knowledge ‘as a dynamic human process of justifying personal

belief toward the truth' (1995:58). Since knowledge is something which is in continuous development, it is never static; it is constantly evolving. It is like gardening: the more a person reflects upon her/his own experiences and/or her/his previous learning the more it will turn into something new. 'Knowledge is a construction of reality rather than something that is true in any abstract or universal way. The creation of knowledge is not simply a compilation of facts but a uniquely human process that cannot be reduced or easily replicated' (von Krogh et al 2000: 6). 'Knowing' is a product of reflected learning; the way we construct our knowledge has an impact on how a person perceives herself/himself as a human being and as part of a social group (Wenger 1998; Giddens 1991). A key element of this constructivist view of knowledge lies in the direction of the focus of reflection. In order to analyze this further it is important to have a closer look at a variety of factors which determine the way a person learns and creates knowledge. Such factors are certainly to be found in a person's own historical, cultural and environmental context (Wenger 1998; van de Lagemaat 2008; Akehurst et al, 2011); the way a person speaks; the way a person interprets her/his own experience; a person's reasoning; a person's perception of the world, a person's intuition; a person's uniqueness and the way s/he decides to construct new knowledge: all these determine the outcome of the knowledge creation process. Viewing the construction of knowledge in such terms means that it is dependent on the unique way a person reads existing, 'reified' information. Reification seems to be an individual process tied to a person's self-awareness and identity-construction (Wenger 1998). Indeed, reification shapes our experience as, from an etymological point of view, it means 'making into things... We project our meanings into the world and then we perceive them as existing in the world, as having a reality of their own' (Wenger 1998: 58). Such a reality is an individually perceived reality and, accordingly, knowledge is shaped by the way a specific individual gives meaning to the situation s/he is reflecting on or living in.

In the German language there is a clear distinction between 'Wissen' (knowledge what), 'Koennen' (knowing how), and the concept of 'Weisheit' (knowing why). If, as stated above, a person understands knowledge either as 'knowing what' (notion-based), 'knowing how' (skill-based) or 'knowing why' (meaning-based) rather than as an intersection and interplay of all three aspects, the construction of new knowledge will be different. For example, for the physicist Richard Feynman, 'knowledge did not describe; it acted and accomplished.... Feynman did not look at paintings, did not listen to music, did not read books, even scientific books. He refused to let other scientists explain anything to him in detail... He pursued knowledge without prejudice.' (Gleick 1992: 14). Such an approach towards knowledge creation seems to be based on a person's intuitive indwelling

with the world (Polanyi 1966) rather than on her/his previous accumulation of notion-based information gathering.

This knowledge creation is dependent on the person's choice of where to put her/his focus when dealing with a given situation. The way the person feels; the way the person chooses to proceed; the way the person judges the situation filtered through her/his own belief system, her/his own personal values, her/his own personality traits, her/his own intuition: all these shape the perception of the given reality s/he is dwelling in (Polanyi 1966). As such, knowledge creation is an 'action-oriented' enterprise. It depends on how a person decides to participate in the world; it is about action and engagement; about participation and taking a stand in the world one is living in (Lave/Wenger 1991; Wenger 1998; Dalai Lama 2005; van de Laagemaat 2008; von Krogh & al, 2000). It is dependent on whether a person sees things as a mental map of distinguished parts, as in the positivistic/cognitive view of knowledge, or as an interdisciplinary, connected, all-embracing whole. The latter may go beyond a 'case of simple mirroring in the mind of what is outside' (Dalai Lama 2005: 233) and may be described as 'a complex process of organization that takes place to make sense of what are technically infinite amounts of information' (Dalai Lama 2005: 233). Such a creative knowledge construction is based on the 'negotiation of meaning, it seems to be an interplay of participation and reification that makes people and things what they are' (Wenger 1998: 70). I tend to agree with what Capra (1984) and the Dalai Lama (2005) mention in their respective books, *The Tao of Physics* and *The Universe in a Single Atom*: It is necessary to work on a dialogue between the cognitive knowledge approach which is still embedded in a variety of Western countries and the investigation of the world/existence as a whole. Knowledge construction may be seen from a perspective of seeing everything connected. The understanding that there is the possibility of having an impact on reality according to how an individual or/and a group are dealing with a given situation may lead to an understanding of knowledge which seems to be in line with the Zen philosophy: knowledge is a never-ending process; knowledge does not fit into words, explanations, teachings, since, 'at the moment you are talking about a thing, you miss the target' (Capra 1984: 31). On another occasion Capra states it as follows: 'The natural world, however, is of indefinite diversity and complexity; a multi-dimensional world in which there are no straight lines or completely regular moderate forms in which things are not done chronologically, but rather simultaneously' (1984: 25). This seems to underline the notion that knowledge cannot be managed, since knowledge is tied to the individual and to the social network it is constructed in; it is an open-ended endeavor; a journey which will lead to new destinations depending on the direction of focus. Knowledge creation and knowledge-sharing, however, can be enabled (von Krogh et al 2000), and knowledge – if seen as both an individual and a collaboratively constructed concept – can be seen

as the core element which will propel an individual, a group or an organization to excellence, status quo or failure. In Bruce Lipton's words, 'We need to move beyond Darwinian Theory, which stresses the importance of individuals, to one that stresses the importance of community....evolution is more dependent on the interaction among species than it is on the interaction of individuals within a species. Evolution becomes a matter of the survival of the fittest groups rather than the survival of the fittest individuals' (2008: 15). In his research on cell recreation, Lipton came to the conclusion that 'our beliefs control our bodies, our minds, and thus our lives' (2008: xxvi), as he found out that 'almost all of the cells that make up your body are amoeba-like individual organisms that have evolved a cooperative strategy for their mutual survival' (2008: xxv). Lipton investigated the recreation of cells after having become professor in a medical school in the Caribbean, finding himself – halfway through the academic year – in a situation of extremely low academic standards among the enrolled medical students. He decided to work very closely with the students by telling them at the start that their lack of views and their lack of knowledge could be recuperated and developed if they were ready to work hard and to take advantage of his continuous support. He started to set high expectations, to praise them for their progress and to focus on positive psychology strategies. At the same time he conducted scientific research on the students' cell reproduction. In short 'he provided a healthy environment for my cells, they thrived; when the environment was less than optimal, the cells faltered. When I adjusted the environment, these "sick" cells revitalized' (2008:19). With regards to his students' knowledge acquisition and construction, the afore-mentioned environment had such an impact on them that, in their final exams, they performed at a level comparable to their counterparts studying at Ivy League universities (Lipton 2008).

Contrary to the notion-oriented positivistic educational system, Lipton's approach was based on a constructivist approach of knowledge; similar to the IB (International Baccalaureate) curriculum. This curriculum strives towards developing an international person who incorporates the attributes of the IB learner profile, which aims to help the learner see knowledge from a trans-disciplinary perspective by developing a deep understanding of important concepts. The IB learner profile focuses on conducting research into knowledge which has local and global significance, on acquiring and practicing a variety of skills, on encouraging the student to develop positive attitudes towards learning, the environment, other people and knowledge acquisition as a whole, and on giving the student the opportunity to participate in appropriate and responsible action. The keywords of the IB learner profile are (The International Primary Year Programme (PYP) 2012) as follows:

- Inquirers: The student develops her/his natural curiosity by acquiring the skills necessary to conduct inquiry and research and to show independence in learning. The aim is to help them enjoy their learning by sustaining a love for learning throughout their lives.
- Knowledgeable: Students explore concepts, ideas and issues that have local and global significance. That allows them to acquire in-depth knowledge and to understand their knowledge across disciplines.
- Thinkers: Students learn to apply their thinking skills critically and creatively in order to recognize and face complex problems by making reasoned and ethical decisions.
- Communicators: Students learn to communicate their knowledge, ideas and thoughts confidently and creatively by acknowledging that one of the key concepts for knowledge creation lies in collaboration.
- Principled: Students learn to become multicultural citizens by acting with integrity, honesty and a strong sense of fairness, justice and respect for other individuals, groups and communities. They learn to take responsibility for their own actions and the consequences that accompany them.
- Open-minded: Students understand their own culture with its histories, values and traditions as one out of many, by being open to grow beyond their cultural boundaries.
- Caring: Students learn social and emotional intelligence by respecting others' feelings and needs. They also develop a personal commitment to service and to contributing to the community at a local and/or global level.
- Risk-taker: Students develop new perspectives by accepting new challenges and facing unfamiliar situations and moments of uncertainty with courage.
- Balanced: Students understand the importance of giving their intellectual, physical, emotional and spiritual needs the same attention in order to develop into a well-rounded person.
- Reflective: Students learn to reflect on their own experience, acquired knowledge and skills in order to become aware of their own strengths and limitations.

(Primary Year Programme, Guide For Parents, 2012)

Such a constructivist view of knowledge emphasizes the uniqueness and the completeness of the knowledge concept. Such knowledge is not easily measurable since it is unique, flexible, tied to the person, tied to the group, and in continuous development. It seems to be a concept of knowledge which aims to integrate 'knowing what', 'knowing how' and 'knowing why' into a single concept (Palmer 2010). Such a view of knowledge acknowledges 'the esoteric and intangible', ergo tacit, 'nature of knowledge to create market niches' (Yeuk-Mui et al 2002: 777). It seems to view

knowledge as a journey without any predefined destination; it views knowledge creation as a process which will lead one to something new. Such a view of knowledge is in line with Socrates' observation 'that all he knew was that he knew nothing' (van de Lagemaat 2008: 459). This means that the knowledge creation process is far from being complete, and knowledge seekers should seek to maintain a sense of wonder; the joy of knowing more about hidden aspects of the world. In this endeavor, both personal knowledge ('knowing of, knowing how, knowing why'), and shared knowledge, one's own ingenuity, one's own and shared assertiveness, the love for an intellectual, emotional, social and spiritual adventure, and the capability of working with people of different cultures and traditions, all prove to be essential ingredients for knowledge creation. (van de Lagemaat 2008; Palmer 2012; von Krogh et al 2000).

I will now describe in more detail the determining variables which shape knowledge.

2.2. Determining variables shaping knowledge

'I was born not knowing and have only had a little time to change that here and there.' (Richard Feynman)

2.2.a) The essence of all knowledge: absolute knowledge

Richard Feynman's quote seems to support the notion that the concept of absolute knowledge is outside a person's reach; if knowledge is tied to a person or to a group of people it may be that knowledge is limited in space and time. Hence, knowledge depends on the way the person and/or the group of people see, perceive and interpret the world/ universe they live in.

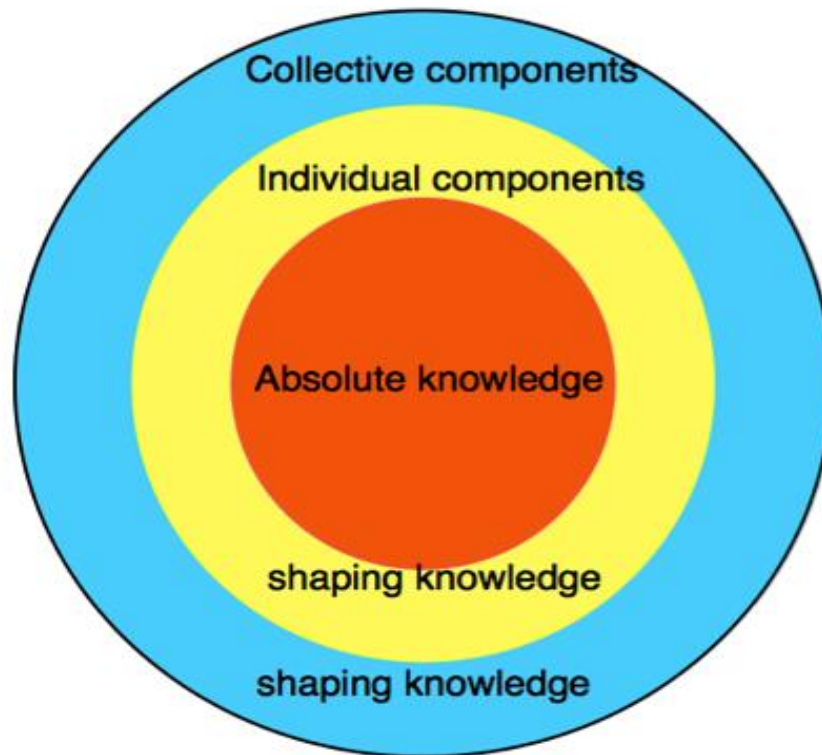
However, the universe as it unfolds may be seen as the absolute knowledge; it lies in front of the individual and the group. Absolute knowledge may be described as 'a priori knowledge' (Erkenntnis a priori) (Kant 1966) which does not require any prior experience. Heidegger calls it the 'forestructure of understanding' (in Stone 2013: 294). Glimpses of absolute knowledge seem to be perceived in moments of intuition; in moments of stillness when something new wants to be born (Tolle 2005) or, as Steup defines it, in moments of introspection (Steup 2013). Such moments of knowledge creation happen when a person meditates and keeps away from the incessant mental noise around them (Tolle 2005). It seems to be experienced in the Now (Tolle 2005; Watzlawick 2002) when a person allows the new to be conceived in the stillness of being. Such knowledge appears to lie beyond mental labeling and mental abstraction; it is a craft of bringing something new

to life by connecting with deeper levels of existence; by making connections with a sense of the whole; by going beyond the surface. Albert Einstein often referred to ‘the importance of exploring ideas intuitively’ (Wenger 1998: 67). Kant referred to the world/universe as ‘the thing as such’ which can’t be known as it is; it can be constructed through the abilities of the human mind, which goes beyond empirical experience. The human mind is the originator of the world the person is living in (Schwanitz 2008). Absolute knowledge is neither good nor bad; it is not quantifiable: a human being or a group of people may, however, just get a glimpse of the whole as every answer is followed by new questions (van de Lagemaat 2008). Absolute knowledge is based on absolute truth, which appears to be the foundation of knowledge. Absolute knowledge cannot be learned in books. It cannot be found as long as we search for it, as Paul Watzlawick (2002) argues, because the search is the only reason for not finding it; out there, in the world, there is no place for finding or having because everything is (‘dass die Suche der einzige Grund des bisherigen Nichtfindens gewesen war; dass man da draussen in der Welt nicht finden und daher nie haben kann, was man immer schon ist’, Watzlawick 2002: 122). According to the psychologist Ernst von Glasersfeld (in Watzlawick 2002), absolute knowledge can be revealed where the individual’s and the group’s constructions fail; when the channel to the ‘timeless abundance of the present moment’ (Watzlawick 2002: 122) is fluid. In such moments knowledge can ‘act and accomplish’ (Gleick 1992: 14).

Such moments of absolute knowing do not seem to be experienced often, as it appears to be a ‘non-intellectual experience of the reality; an experience which happens during an unusual moment of consciousness in mystic moments of meditation’ (‘Absolutes Wissen ist somit eine voellig nicht-intellektuelle Erfahrung der Wirklichkeit, eine Erfahrung, die in einem gewoehnlichen Bewusstseinszustand auftritt, die man einen meditativen oder mystischen Zustand nennen kann’, Capra 1984: 27). However, the human being is an enquirer, a seeker who constantly tries to make sense of her/his knowledge by building upon existing knowledge and by comparing it with his/her prior experiences. Thus, each construction seems to be dependent on the prior steps which have been undertaken, and these lead to a specific, unique construction (Watzlawick 2002). It appears, therefore, to be the responsibility of each individual and each group to decide on how to use the acquired knowledge. The ability to use knowledge in a responsible way may be called wisdom. Wisdom is known to be dependent on the good judgment, the breadth of vision, the degree of self-knowledge, the degree of responsibility and a sense of intellectual humility (van de Lagemaat 2008), or, as Viktor Frankl phrased it: it is about ‘taking responsibility for the search of the right answers to the questions of life’ (1982: 125).

Absolute knowledge may be positioned, therefore, in the centre of the graphic as shown below. It may be seen as the ultimate essence of all knowledge and the potential goal for humankind to discover. It seems that Michael Polanyi's statement 'we know more than we can tell' (1966: 4) is of great relevance as it is the human being's aim to achieve 'an understanding of the world – physical as well as mental – through the perspective of knowledge' (Polanyi 1966: x). Polanyi calls this the tacit dimension of knowledge 'which points to the fact that we can integrate the particulars of physiognomy without being able to identify, in any precise way, those particulars' (Polanyi 1966: x). This 'tacit knowledge' dimension will be further analyzed in the next section.

This reflection on absolute knowledge leads me to suggest that science and research may be sensitive to the integration of absolute knowledge in their intellectual endeavours. An openness towards such an approach may lead scientists and researchers towards an experience of 'being', rather than an experience of 'seeking'; it may give rise to a view of knowledge based on 'the world as a woven texture of world lines in space and time, with everything moving freely', connected by 'a unifying principle that would either explain everything or explain nothing' (Feynman, in Gleick 1992: 7). It may lead them to see the limitations of explaining, teaching, labeling, measuring, evaluating and interpreting, since, at the very moment one talks about something, the goal cannot be reached (Capra 1984). Such an understanding may help one recognise that knowledge, as constructed and used by human beings, is dependent on various components: both individual components which shape the knowledge creation process, such as a person's personal talents, self-perception, motivation, assertiveness, creativity and experience, as well as collective components such as a person's cultural (historical, linguistic, social and gender-specific) background (see graph below). As such, knowledge will always be limited.



All integrating knowledge-concept (Figure 1)

2.2.b) The individual components shaping knowledge

Given that knowledge is based on the unique action-oriented and reflective interpretation of each individual, I agree with Takeuchi & Nonaka's (1995) and von Krogh's (2000) view of knowledge: knowledge is embedded in a person. Knowledge creation is based on the individual's self-reflection on her/his own experience by making 'associations, finding connections with what is already known, so it is linked to our own unique life experience' (Rafferty 2013:31). Through such reflective practices, an individual becomes more aware of her/his self, individual skills, personality traits and her/his embedded personal knowledge. 'To hold knowledge is an act deeply committed to the conviction that there is something there to be discovered. It is personal, in the sense of involving the personality of him who holds it, and also in the sense of being' in the world (Polanyi 1966: 25). As Polanyi states in *'The study of man'*, we 'must learn to accept as our ideal a knowledge that is manifestly personal (1959: 27); and 'life exists predominantly in the form of individuals' (Polanyi 1966: 52). I would argue that knowledge is based on our own unique way of giving meaning to what we are engaging in, since even past experiences which we are not able to recall anymore 'affect the way we see things' (Polanyi & Posch 1976: 34).

Among the individual components which shape knowledge, I would prioritize the person's self as the main factor which determines how knowledge is viewed. An individual's personality, self-awareness and self-identity are based on 'a reflexively organized Endeavour' (Giddens 1991: 5). Dependent on a person's own definition of knowledge – whether it be from the perspective of connecting with absolute knowledge (Watzlawick 2002; Capra 1984), from a cognitive/positivistic standpoint (see above) or from a constructivist point of view (where the knowledge-holder is a seeker who aims to find answers to questions that arise and which lead to further questions tied to the individual) – the acquisition and creation of knowledge will differ accordingly. Indeed, as Giddens argues, 'the reflexivity of modernity actually undermines the certainty of knowledge, even in the core domains of natural sciences' (1991: 21). Giddens calls this 'intrinsic reflexivity' (1991: 19) which is based on a person deciding consciously to trust the process. Such trust helps an individual to acquire 'an ontological understanding of external reality and personal identity' (1991: 47) which leads her/him to develop into an autonomous and self-confident person, leveraged by an attitude of 'basic trust' which, according to Giddens, 'is the condition of the elaboration of self-identity' (1991: 41-42). On the contrary, a person who is worried about the future – who is entrenched in anxiety and self-defeating patterns – will see her/his reality differently. As such the individual creates her/his reality by 'organising reflexively in the present' (Giddens 1991: 30) her/his future. Indeed, the individual has the power to 'alter the material world and transform the conditions of their own actions' (1991: 138) by actively taking part in the knowledge-creation process.

Knowledge-creation is also skill-related (Giddens 1991). Within this viewpoint it is important to acknowledge the concept of the multiple intelligences of Robert Sternberg (1997) and those of Howard Gardner (in Betts & Kercher 1999), which no longer categorise human beings according to their general IQ, but rather based on their personal skills. Since personal knowledge (tacit knowledge) varies according to a person's individual skills (linguistic; musical; logical-mathematical; spacious; physical-kinesthetic; interpersonal; intrapersonal; naturalistic; existential intelligences), I would argue that such knowledge is 'closely related to the concept of the skills' (Leonard & Insch 2005: 496) and varies accordingly. Such knowledge creation allows individuals to create knowledge that they personally value, that they personally want to pursue and that they personally want to deepen further.

The individual's personality and her/his skills have an impact on how s/he perceives the environment s/he is living in. Knowledge acquisition and creation is therefore dependent on the person's individual perception through the five senses (van de Lagemaat 2002). The person's

empirical experiences and intellectual studies will be seen through the lens of the person's feelings, emotions and moods, as 'anything can exist independent of our experience' (van de Lagemaat 2002: 98). Our perception, however, is fallible and cannot be objective. In addition, a person's reasoning – whether it is based on deduction (from general to the particular) or on induction (from the particular to the general) – will never be objective, since it is dependent on the individual's own fixed habits of thinking and his/her own personality traits and skills (Giddens 1991; Huser 2001; Sternberg 1997). Knowledge acquisition and creation is an ever-changing process and, as Heraclitus argues, one 'can never step in the same river twice' (in van de Lagemaat 2002: 133). A special emphasis may be given to a person's motivation to acquire and create knowledge. An 'intrinsically' motivated person may reflect on and act upon their reality differently from a person who is 'extrinsically' motivated. Intrinsically motivated individuals seem to experience the condition of flow because in such moments 'we learn to become who we are because we act freely, for the sake of the action itself rather than for ulterior motives. When we choose a goal and invest ourselves in it to the limits of concentration, whatever we do will be enjoyable. And once we have tasted this joy, we will redouble our efforts to taste it again' (Csikszentmihalyi 2004: 65). Indeed, such intrinsic motivation is driven by the individual's emotions. The etymological meaning of emotion comes from the Latin term '*movere*' - to move. Emotions are the driving force behind a human being's mind and body. Emotions provide a human being with the energy to engage in something (van de Lagemaat 2002). Emotions have an impact on a person's reasoning. Indeed, depending on where a person situates her/himself (whether more towards the school of romanticism or towards the school of rationalism), the knowledge creation process will develop accordingly. As such, I agree with Akehurst et al's teaching: 'It is not change that forces us to modify our behaviour, it is our actions that modify the physical, technical and social support which lead to change' (2011: 59). Thus it would appear that 'knowledge is', eventually, 'only created by individuals' (Nonaka & Takeuchi 1995: 59).

Another notion which, in my view, underpins this statement is that of 'intuition', which, again, is tied to the individual. Intuition can be understood as those 'aha' moments: solutions which just appear to the person as a whole; moments of insight when things become clear and evident. Such experience is based on unconscious processes, where the human mind appears to be free of any kind of critical judgment and evaluation (Swart 2002). It is experienced as a revelation of something which has not yet been discovered (Polanyi 1966), which connects the knower to the 'unrevealed reality' (Polanyi 1966: 70) through a force called intuition, which can probably only be understood on 'metaphysical grounds' (Polanyi 1966: 81; Capra 1984; Watzlawick 2002). Intuition, according to the afore-mentioned authors, 'leads to an understanding of a complex underlying structure'

(Swart 2002: 23) as ‘one can discover only something that was already there, ready to be discovered’ (Polanyi 1959: 35). Christophe Barraud, a chief economist, calls himself the seer who uses his intuition to predict the next phases in banking. This skill has helped him reach the most effective results worldwide in banking during moments of crisis (<http://www.zeit.de/2014/10/christophe-barraud-konjunktur-usa/seite-1>)

These individual variables discussed above have a powerful impact on the knowledge acquisition and creation process. This leads me to the understanding that, although there is an underlying universal structure which we may call absolute knowledge, knowledge is always personal (von Krogh et al 2000) and, as such, ‘the ideal of pure objectivity in knowing and in science has been shown to be a myth’ (Polanyi & Prosch 1976: 63) since ‘they are rooted throughout... in personal acts of tacit integration’ (Polanyi & Prosch 1976: 63).

Although ‘knowing’ is dependent on the individual variables mentioned above, knowledge also depends on the individual’s participation, engagement and involvement in the collective. The next section will further analyse the collective components which shape knowledge.

2.2.c) The collective components shaping knowledge

Individual knowledge becomes collective knowledge by sharing it with other people. Knowledge undergoes change through social interaction (von Krogh et al 2000); through this interaction with others, individuals share their respective individual expertise, opinions and ideas through dialogue and conversation (Nonaka & Takeuchi 1995). Although, eventually, all knowledge is personal, through the act of participation it ‘integrates groups of particulars into their joint meaning’ (Polanyi & Prosch 1976: 52). According to Lave and Wenger (1991), meaning is negotiated through the collective construction of knowledge. The exchange of personal knowledge is crucial as it helps members of a group (a ‘community of practice’) acknowledge the value each member brings to the group and the importance of ‘see[ing] the world as a complex system, in which everything is connected to everything else’ (Senge et al 1999: 191). Knowledge lies, therefore, not only within, but also between individuals (Swart 2002). As such, ‘knowledge can be held collectively, in shared experiences and interpretations of events’ (Swart 2002: 18). According to Bowman & Swart the collective knowledge of an organization is a synergy between individual knowledge and the knowledge of the group (2007). Such knowledge is passed on through ‘learning by doing’ and it puts a special emphasis on the interrelation between group members (Bowman & Swart 2007).

According to von Krogh et al (2000), ‘the human skills that drive knowledge creation have much more to do with relationships and community-building than databases, and companies need to invest in training that emphasizes emotional knowledge and social interaction’ (2000: 27). By doing this, personal knowledge leads to collective shared knowledge in order ‘to shift from a commitment to one’s own interest to that of the group’ (von Krogh 2000: 58). As such, I would argue, knowledge is not only embedded in one person, but also in the interaction with other people and the relative environment. A culture of open-mindedness where people habitually meet and share their respective knowledge towards a collective vision or a collective goal may facilitate the collective knowledge-creation process. It is a ‘complex process that combines doing, talking, thinking, feeling, and becoming. It involves our whole person, including our bodies, minds, emotions, and social relations’ (Wenger 1998: 56). Knowledge gets constructed through the interplay of participation and reification. Reification takes place through language. Indeed, ‘words as projections of human meaning are certainly a form of reification... words affect the negotiation of meaning through a process that seems like pure participation’ (Wenger 1998: 62). Language helps create clarity of meaning. Although we may know what a specific word or sentence means from an etymological or grammatical point of view, the interpretation of each word is subjective (van de Lagemaat 2002). Such awareness, however, leads the respective members of a group to ‘distinguish between language per se and what language denotes and describes; communication leads to inter-subjectivity and the ability to create shared collective meanings’ (Turner 1988: 98-99).

Shared participation, shared practice, shared understanding, shared processes and shared assumptions may be reached through collective reflection, collective interpretation and collective action which may, in its highest level, as Nonaka et al (in Glisby & Holden 2011) denote it, be expressed through collective improvisation. Such shared practice may lead to a collective identity where ‘an employee identifies with the organization, s/he will want to impact the organization’ ... and ‘influence on their enacted environment’ (Brohm 2006: 254). If this happens, human capital evolves through social capital into organisational capital where the person’s embedded capital transmutes into ‘embodied capital’ of the group (Bowman & Swart 2007). This may lead to a culture of care for the organisation where emotional knowledge finds its place through active empathy (von Krogh et al 2000), a sense of belonging to a community and a ‘sense of trust’ which are critical components ‘for individuals to become a member of a community’ (Oztok 2012: 31) of practice, and to work collectively on knowledge creation processes.

Although, as mentioned above, there are collective components in shaping knowledge, I would argue that the very essence of knowledge acquisition and creation remains personal. Milton

Bennet's Development Model of Intercultural Sensitivity (DMIS) may help illustrate this notion (Bennett 2004). Bennett distinguishes six distinct modes of experiences across what he calls the continuum between 'ethnorelativism' and 'ethnocentrism', as below.

Ethnocentric			Ethnorelative		
Denial	Defense	Minimization	Acceptance	Adaptation	Integration
My cultural experience is the only one that is real and valid. There is little to no thought of "other."	"We" are superior and "they" are inferior. One feels threatened and is highly critical. What is strange may be labeled as stupid.	Other cultures are trivialized or romanticized. One tends to deny differences (e.g., "color blind") and only seek similarities.	I accept but may not agree with other cultures. Generally, I am curious and respectful.	I "see" the world through different eyes and make intentional changes in my own behavior and values.	I easily move in and out of different cultural worldviews.

Milton Bennett Intercultural Sensitivity Model (Figure 2)

It is up to the individual to relate her/himself to their environment according to the six modes: denial, defense; minimization (=ethnocentric); acceptance; adaptation; integration (=ethnorelative). Such categorisation will be shaped by the individual's personal, tacit interpretation of the situation s/he is dwelling in. This outlook will now lead us to a closer study of the tacit dimension of knowledge.

2.2.d) The tacit dimension of knowledge

As stated in the explanations on knowledge (above), I would argue that all knowledge is ultimately personal, unique and not easily replicable as it is tied to the person. The literature calls such knowledge 'tacit' knowledge. Tacit knowledge may therefore be seen as the 'clay that participants work with' (von Krogh 2000: 135); tacit knowledge is about a person's own thinking based on her/his own previous experience by reflecting on it – even on past experiences which can no longer be recalled – and by connecting the particulars to the whole through reflective practices which will lead to knowledge acquisition or/and knowledge creation. (Oztok 2012; Polanyi 1966; 1959; Polanyi & Prosch 1976). Tacit knowledge may be seen as 'the necessary component of all

knowledge' (Akehurst et al 2011: 88), the pre-requisite of all knowledge (Stone 2013) or, as Polanyi argues, 'tacit knowing is the dominant principle of all knowledge' (1959: 13) because, eventually, knowledge is only meaningful when a person takes it to heart and integrates it into meaningful action (Wenger 1998). Tacit power, as Polanyi describes it, consists of comprehending what lies in front of us by making sense of it and by reaching an understanding about it. Indeed, codified/explicit knowledge does not mean anything as long as a person interprets it; the same applies to the understanding of words and language (Polanyi 1959). Pasher & Ronen argue that 'tacit knowledge is expressed in responding to new situations and problems thus creating new knowledge' (2011: 91), and this goes beyond 'knowing what', since it integrates 'knowing how' and 'knowing why'. Recalling specific data is different from explaining how the detail is connected to the whole – vertically and horizontally (Duguid 2005; Reichert 2006).

An important aspect of tacit knowledge is that it is impossible to formalise since it is 'rooted in action, procedures, commitment, values and emotions' (Subashini 2010: 36). This also has something to do with the idea that people know more than they can tell (Polanyi 1966), and that they often do not realize what they actually know (Rafferty 2012). As such, the nature of tacit knowing is unpredictable because it is learned without the intention of learning (Leonard & Insch 2005); it is acquired implicitly and, often, by not being aware of the knowledge acquisition that has taken place. Tacit knowledge is, therefore, 'embedded in the minds of specific individuals' (Shamsie & Mannor 2013: 513). I would argue, in alignment with Polanyi (1959; 1966; Polanyi & Prosch 1976; Stone 2013), that knowledge is not only embedded in the minds of an individual, but also implicitly and subconsciously in their body, which integrates the three aspects of knowledge mentioned above: knowing what; knowing how and – in the process of making sense of both knowledge acquisition and knowledge creation – knowing why. These three kinds of knowledge cannot be seen separately since they integrate details into a whole in order to make sense of what lies in front of an individual. Polanyi develops a theory of knowledge which is based on the findings of Gestalt-psychology when he argues that 'we cannot comprehend a whole without seeing its parts, but we can see the parts without comprehending the whole' (1959: 29). However, in alignment with the findings of Stone (2013) I would go further by saying that a person might be able to understand the parts by comprehending also the whole. This happens when a person believes in a hidden reality, which I have called the pursuit of 'absolute knowledge'; the decision of a person to believe in a hidden reality which is already there and which may be discovered through intuition, in moments of meditation and stillness (Tolle 2006). As such we may interpret the tacit 'as the unacknowledged ground of what we are saying. It is there as 'the forestructure of the understanding from which we hold forth' (Stone 2013: 300). This means that the tacit is grounded on a

metaphysical awareness where the individual shifts from a mere rational and cognitive understanding towards a being in the world through an ‘existential participation of the knower in the subsidiary particulars known by him as their joint meaning or purpose’ (Polanyi 1959: 32).

Therefore, tacit knowledge may be seen as a way of expressing who we are and of positioning ourselves in the world we are living in (Oztok 2012). Tolle (2006) argues that such knowledge should be considered as sacred knowledge, as it appears to be the essence of who we are. Through the tacit knowledge exchange, a person is ready to open up and to justify her/his own thinking to others. Such exchange may be affected by a stark emotional component as a person is willing to reveal very hidden aspects of her/himself towards others, which may result either in stronger participation processes in the collective (small groups, CoPs, departments...), or in potential power struggles (Oztok 2012; von Krogh et al 2000). The ‘commitment shifts from the person’s own interest to the collective interest’ (von Krogh et al 2000: 58) which may lead to reflective individual and collective action in a process of indwelling, participation and engagement with the world around us (Stone 2013). Stone calls this the ‘tacit integration of experience’ (2013: 62).

Considering that the tacit is the dominant part of all knowledge, it would seem, therefore, that the core task of a higher education institution lies in finding strategies which make best use of each worker’s tacit knowledge in order to create competitive niches in an ever-changing society (Palmer et al 2012). This would help develop the ‘human capital’ (HC) into ‘intellectual capital’ (IC) or ‘organizational knowledge’ (Nahapiet & Ghoshal 1998; Pei-Lee & Chen-Chen 2011; Swart 2006). This can be achieved through ‘social capital’, the interaction between individuals, sub-units or departments in the organisation (Wenger 1998; Lave & Wenger 1991). Such social capital has been called the ‘fibre of the process of conversion of HC into IC’ (Swart 2006: 145). HEIs should, therefore, engage in activities and strategies which facilitate the creation of an environment which encourages knowledge-sharing between different individuals, sub-groups and departments on a daily basis, so that it may become imprinted in people’s minds (Sanchez 2005). Such strategies do not lie in managing knowledge by storing it in databases or piling it in archives, but rather by facilitating the flow of tacit knowledge in such a way that the knowledge flow becomes part of every individual’s job (Davenport & Prusak 2000; von Krogh et al 2000; Leistner 2010), in which its value towards oneself and the institution may be realised by all parties involved, as it eventually leads to a perception of making a difference and giving meaning (Nonaka & Takeuchi 1995; Palmer et al 2010). Such strategies may be seen as one of the main sources of sustainable competitive advantage, since organisations which have invested in an ongoing engagement of tacit knowledge-flow activities have proved themselves successful on an ongoing process of change by having been

ready to embrace the challenges of today's world by celebrating knowledge-sharing strategies on an ongoing basis (Brewer & Brewer 2010). Indeed, these organizations have understood that 'knowledge sharing is crucial in order for firms to develop skills and competences, increase value, and sustain competitive advantage' (Matzler et al 2011: 296). This leads to knowledge-sharing practices being sustained at an organizational and individual level by social routines and practices, called 'organizational citizenship behavior' (OCB)' (Pei-Lee & Chen-Chen 2011: 11).

Transposed to a higher education level, it would appear that the phenomenon of interactional expertise (Collins, in Stone 2013) would be a promising tool for HEIs to benefit from the tacit knowledge of both the academic and professional manager who would – through respective tacit knowledge sharing practices such as dialogues and conversations – develop into experts in the other's professional field 'without ever receiving formal training' (Stone 2013: 290). Such inter- and multi-disciplinary collaboration may result in social capital (social participation and engagement) where the respective individuals of a group may draw from their respective experience (the 'bonding' type of social capital) and by opening up the conversations beyond their own group towards 'people from other communities, cultures or socioeconomic backgrounds' (the 'bridging' type of social capital) (Oztok 2012: 30). Glisby & Holden call such cross-cultural interactions 'coupling', which 'is the process of reflexivity-based action for facilitating knowledge flows connecting individuals, organizations, and networks' (2011: 64). Indeed, it appears that competitive advantage arises from such coupling; from the collective sharing and co-creation of tacit knowledge across the individual, network (CoP) and organisational levels (Glisby & Holden 2011).

Before describing the space (ba) in which tacit knowledge sharing may lead to the creation of new competitive niches within higher education, I will draw upon Nonaka and Takeuchi's (1995) theoretical framework of SECI model (Socialisation; Externalisation; Combination; Internalisation) to reflect on how it may be transposed to higher education institutions.

2.3. Nonaka and Takeuchi's theoretical framework on knowledge-creating companies

According to Nonaka & Takeuchi (1995), knowledge must be viewed as the most important and single greatest asset a company owns. Knowledge is power; knowledge is, according to Drucker, 'the only meaningful resource today' (in Nonaka & Takeuchi, 1995:7); knowledge is, in their view, the core element for a company to be competitive and to make a difference in its own employees' and clients' lives. For this to happen, it is important to understand that knowledge is not sufficient if it is withheld, hidden in one person's head; it has to flow, to be transferred, to be shared. Only then can it be enriched and applied on a larger scale. As Bruce Lee, the American actor, martial

artist and philosopher said, 'Knowing is not enough, we must apply' (<http://quoteworld.org/quotes/8155>). 'Applying' means, according to Nonaka and Takeuchi (1995), the creation and building of new knowledge by sharing it with others, as well as the enriching of one's own knowledge through interaction with the knowledge of co-workers, and through communicating with all parties interested in the process (organization, co-workers, clients and competitors). In order to be competitive and successful in today's ever-changing world, a company/institution must get engaged in such ongoing knowledge-sharing practices.

After studying Nonaka & Takeuchi's theoretical framework in depth, it seems that one of the reasons for the success of many of the Japanese knowledge-creating companies is to do with their cultural and philosophical background. Japanese people view the organization as a living organism, built upon individuals who feel part of the organization. In Japanese culture, people see themselves as being part of a 'oneness' of body and mind; each person in the company feels responsible for the creation of new knowledge alongside their co-workers in order to 're-create the company and everyone in it on an ongoing process of personal and organizational self-renewal' (1995:10). According to the authors, knowledge renewal takes place through an ongoing 'inside-outside' interaction, with the willingness of all parties to share their experiences, skills, knowledge and ideas with others. This allows these qualities to be internalized universally, giving the company an increased competitive advantage.

In parallel with this view, there is also an understanding that each discipline is important and, as such, has its own value. Knowledge-sharing, therefore, takes place on an inter-disciplinary level, where every kind of 'tacit knowledge' has its place. As Nonaka & Takeuchi (1995) suggest, this seems to be the opposite of the Western approach where the 'object' gets separated from the 'subject' (positivistic view). Instead, the Japanese view is based on this sense of 'oneness'; the understanding that every discipline gives a new viewpoint about the topic of interest. Knowledge, as such, is seen from an interconnected perspective (metaphysical view). In this way disciplines work together in order to create knowledge that puts the client first. Indeed, according to Steve Jobs, knowledge has to encourage the idea of 'belief in the customers' dreams' as well as the ability of employees 'to change the world' (Gallo 2010:109).

The second element for success, in Nonaka & Takeuchi's view, seems therefore to lie in the interconnectedness of various disciplines. As stated above, instead of separating and specializing further in distinctive fields, Nonaka and Takeuchi underline the importance of sharing knowledge between the different fields, as creativity lies in connections. 'Connections' here may refer to seeking out new and diverse experiences, questioning the status quo, experimenting with new

surroundings, expanding the 'domain knowledge' by surrounding oneself with people from a variety of fields, and observing new contexts (Gallo 2010). Successful knowledge-creating companies encourage their workers to develop these attitudes and skills; they want them to take risks, to talk to and observe one another, to keep an attitude of curiosity, wonder, amazement (Palmer et al 2010), and they give them the opportunity to make mistakes. Indeed, Nonaka & Takeuchi observed that each 'excellent company has created its own unique corporate culture which determines how a company thinks and behaves' (1995:45); a trans-disciplinary corporate culture based on ongoing conversations and exchange (ba).

The success of excellent companies lies also in how they organize the flow of 'tacit' and 'explicit' knowledge. Nonaka & Takeuchi (1995) draw on Michael Polanyi's distinction between the two: 'tacit' knowledge is a person's own personal knowledge, his/her experience and skills, and is therefore not easy to communicate; 'explicit' knowledge, on the other hand, is the formal and codified knowledge open to all via documents in a systematic language. While 'tacit' knowledge is tied to the 'here and now' as it is continuously changing, 'explicit' knowledge refers to the past and can be put in a codified common language (Davenport & Prusak 2000). According to Nonaka & Takeuchi, however, *all* knowledge derives from 'tacit' knowledge originally, and, as it is used, even 'explicit' knowledge must become 'tacit' eventually, as it will be interpreted by the next person's beliefs, experiences and values. The authors argue that successful companies see the value of their workers' tacit knowledge, and they understand that all knowledge is rooted in each individual. Therefore they make their co-workers experience their self-worth and value by giving them the opportunity to be creative, to think differently and to make mistakes if needed. The word 'redundancy' (Nonaka & Takeuchi 1995:80) is an asset for successful companies. It allows their employees to 'chat about their current work with whomever they find and these random conversations will create value for the firm' (Davenport & Prusak 2000:121). According to Nonaka & Takeuchi (1995), the knowledge-sharing takes place in four modes: socialization, externalization, combination and internalization. The socialization takes place through face-to-face communication and shared experience. It is a 'tacit to tacit' knowledge-sharing. In the externalization mode, concepts are developed in order to put the combined shared experience into a common language. The use of analogies, story-telling or metaphors help to find this common ground. Analogies, for example, help to 'see something novel in a familiar light' (Gallo 2010:89), so that new creative connections can be made. This is a type of 'tacit to explicit' knowledge-sharing. In the combination mode, the newly created explicit knowledge will lead to the creation of prototypes of new knowledge; for example, training courses or formal education programmes can be seen as a combined knowledge-sharing process. Here 'explicit' knowledge leads to 'explicit' knowledge. The

internalization is the process which could be called ‘learning by doing’, where explicit knowledge becomes tacit again and becomes part of the mental model; the mindset of the individual. As such, so argue Nonaka and Takeuchi (1995), it will eventually be shared by more and more members of the organization: an important aspect of reinforcing the company’s organizational culture.

Another factor for successful knowledge-creating companies is the authors' view on how a situation of crisis should be perceived. They see it as an asset, as an opportunity for growth and for stepping out of the status quo. In fact, the authors found evidence that successful companies want their employees to experience moments of crisis because they want to take advantage of how the human brain is working. According to Gregory Berns' (2008) theory, the brain needs to be bombarded with as many new experiences, new ideas, and as much new knowledge as possible, if a creative output is expected to happen (Gallo, 2010). Diverse authors agree by saying that, in successful companies, crisis is seen as an important requirement for renewal (Davenport & Prusak 2000; Nonaka & Takeuchi 1996; Palmer et al 2010; Shattock 2003).

In short, according to Nonaka & Takeuchi (1995), tacit knowledge needs to be viewed as the main asset of a company. In order to make tacit knowledge flow accordingly, the following elements seem to be involved: organizational identity and culture, an organization's understanding of its own place in space and time, and of the importance of tacit knowledge-sharing and knowledge creation, its interconnectedness between the different disciplines (Swart 2011) and a focus on a trans-disciplinary dialogue for creativity to take place, as well as a new positive and neurological understanding of where challenges can lead us to. All these elements seem to play a crucial role for a company/institution to be successful in a reality which is characterized by uncertainty.

2.4. Can Nonaka & Takeuchi’s model be transferred to HEIs?

Considering that HEIs fall into knowledge-oriented organizations and that their essence lies in communicating, transferring and creating new knowledge by ‘destroying the existing knowledge system and then innovating new ways of thinking and doing things’ (Nonaka & Takeuchi 1995: 50), Nonaka & Takeuchi’s model should be transferrable to such institutions. From a humanistic point of view, the main emphasis might have to be given to the value of each human being embedded in a bigger organization. The person’s attitude and personality traits (Kezar & Eckel 2002; Dhanaraj et al. 2004; Matzler et al 2011; Sternberg 1997; Goleman 2007; Huser 2001) and the focus on the person as an all- embracing entity who is continuously looking to grow for the benefit of both her/himself and the organization, Nonaka & Takeuchi’s model could provide an interesting approach for higher education institutions. In such a context, each individual seems to

recognize her/his value (Alvesson, 2000) and the difference s/he can make for her/himself and the institution (Palmer et al 2010).

Baumard (2001), Kezar & Eckel (2002) and Leana & Van Buren (1999) argue that the co-worker perceives her/himself as being part of a shared identity which is driven by an explorative and inquiry-based mindset aiming to construct and transfer meaning by applying it accordingly (PYP, 2007). Such an individual perceives him/herself as part of the solution and not as part of the problem, and this will eventually lead to the construction of a strong self-image (Giddens 1991; Alvesson 2000; Pei-Lee & Chen-Chen 2011).

The key, however, does not only seem to lie in the creation of an organizational identity shared by all members (Leana & Van Buren 1999) who are embracing an inter-disciplinary approach, but also in an organizational structure which facilitates the flow, the mobilization and the use of tacit knowledge for competitive advantage purposes (Nonaka & Takeuchi 1995; Davenport & Prusak 2000) from lower to higher ontological levels by creating more autonomy (Meguc et al 2011), more space for individual and group responsibility (Yeuk-Mui et al 2002), more ways of interaction (social capital) between and across various levels and by adhering to a common vision enacting as the engine of the organizational and social capital (Kezar & Eckel 2002).

It seems, therefore, that Nonaka & Takeuchi's model can be transferred to HEIs if the organizational structure is based on a combination of collegium and enterprise (McNay 1995), with standardized elements of a bureaucracy approach where necessary and inspired by a strong shared organizational and collective identity.

Its success, however, seems to be closely tied to the size of the institution, to its institutional culture and the way that both academic and professional managers perceive themselves be part of the institution (Alvesson 2000; Clarke et al 2012; Henkel 2000; Vaelimaa 1998; Whitchurch 2004/6/8). In the next section I will try to answer the question of what HEIs can learn from Nonaka & Takeuchi's work (1995) on KM.

2.5. What can HEIs learn from Nonaka & Takeuchi's theoretical framework in order to enhance tacit knowledge sharing practices?

One of the most important teachings of Nonaka & Takeuchi's work might seem to be the fact that, for knowledge-based institutions to be successful, knowledge has to be seen as the main asset of the organization and therefore it has to flow across all ontological levels, from low to high and *vice*

versa, and in lateral terms as well (Nonaka & Takeuchi 1995; Davenport & Prusak 2000). Unfortunately, this does not always happen at higher education level, as academic and administrative co-workers have a different view of their identity. After studying the literature regarding the respective identities of professional managers and their academic colleagues, it would seem that the identities of academics are seen to be tied primarily to their academic discipline (Henkel 2005, Bacon 2009) while the identity of professional managers is more tied to the institution as a whole (Shattock 2003, Bacon 2009). According to Whitchurch (2008) and Henkel (2005), in HEIs the identity of both academics and their professional colleagues is continuously changing. The requirements of professionals managing HEIs lie in leading the institution into a successful future by responding to the challenges HEIs are facing. In fact, the literature recognizes that the complexity of HEIs has put significant pressure on all professionals working at that level. It seems that, due to the major changes mentioned above, identity at HEI level cannot be seen as a steady element (Henkel 2000), rather as a 'multiple and contextual' one (Alvesson, 2000:1105) with a strong perception of self-image; staff, working at this level, are usually people who 'like what they do' (Alvesson 2000:1104). According to Valimaa, identity can only be established through a continuous dialogue with 'significant others' (1998: 131). In times of change, the priority seems to be keeping identity as flexible and open as possible, breaking through boundaries and understanding that the identity of all requires continuous overlapping and reciprocal understanding ('collective understanding' in tacit terms). Whitchurch (2004) argues that the interface between academics and professionals creates potential for collaboration, since, in postmodern times, individuals tend to move 'across functional and organizational boundaries' (Whitchurch 2008: 5) and continuously have to reinterpret their roles in order 'to create new professional spaces, knowledges and relationships' (Whitchurch 2008: 5).

What we learn from Nonaka & Takeuchi's work is that the future might be seen in what Cèlia Whitchurch calls the 'third space' (Whitchurch 2008:28), where professional and academic activities co-exist and diverse professionals share their knowledge and expertise in order to enhance a trans-disciplinary approach, a collective and shared institutional identity (Henkel 2005; Baumard 2001; Van Buren 1999; Swart 2008; Glisby & Holden 2011; Stone 2013). This allows the creation of new knowledge which allows the institution to look into a future where competition can be seen as enrichment instead of a threat. Staff with a 'third space' view are perceived to be rounded professionals as, by having a 'three hundred and sixty degree insight of the institutional challenges through the lenses of interactional expertise, as Collins calls it (in Stone 2013), they tend to identify themselves with the shared values of the institution, where knowledge-sharing between different departments, an understanding of the needs of the territory and the nation, and an identification with

the symbolic and spoken language used in the institution all lead to a collective identity that enhances the knowledge-sharing attitudes between all faculty members (Henkel 2005). If this collective identity is strong (Gioia & Thomas 1996), meaningful and has something to do with the staff's life purpose (Palmer et al 2010), then, according to Kezar & Eckel, all knowledge workers of the institution seem to be in the position of identifying themselves with the institution's identity 'because people feel part of the process' (2002:307). Although ultimately all tacit knowledge is tied to the individual, a strong corporate identity seems to influence the willingness to communicate between all professionals, their behavior and their corporate culture (Valimaa 1998). A corporate identity with a clear emphasis on the 'sense-making' direction (Gioia & Thomas 1996) of the institution is recognized to have a positive impact on all staff. Swart's model of four identities, organizational, field, professional and client – students for learning, teaching, industry and the territory for research (Swart, 2012) – can start to form a collective organizational identity which can be shared by all. This will lead to an enhanced knowledge-sharing capability at all levels.

A second key teaching of Nonaka & Takeuchi's work is for HEIs to maintain what is at the core of these institutions: to be driven by 'shoshin', a word from Zen Buddhism, which means 'to keep a beginner's mind'; a mind like a child, driven by curiosity, amazement and wonder (Palmer et al 2010). For HEIs this represents a strong desire to become an expert willing to view her/his field from a trans-disciplinary point of view by developing 'something like Interactional Expertise in collaborative situations' (Stone 2013: 294); by dwelling in the world as a whole and by recognizing that there is more to it than what we see, observe and perceive; that there lies more behind the appearance of our own field and our own understanding, by acknowledging that 'things refer to one another and derive their meaning from those references and the contexts of use and relation in which we find them' (Stone 2013: 295-296). Such professionals seem to be interested in other fields in order to generate 'break-through knowledge' by listening to others, and by integrating these perspectives into his/her own understanding (Davenport & Prusak 2000; Nonaka & Takeuchi 1995; Palmer et al 2010; Swart 2011). Instead of 'separation', knowledge-sharing seems to be based on 'bringing together', on connecting elements in order to disseminate new knowledge (Swart 2011).

A third teaching is that a concise, clear and consistent vision (Kezar & Eckel 2002) helps to establish a distinct organizational culture of cross-boundary and trans-disciplinary knowledge-sharing and behaviors, which have a positive impact on the employees' commitment (Kinnie & Swart 2012; Leistner 2011; von Krogh et al 2000; Pasher & Ronen 2011) to work hard (Alvesson 2000) and to love what they do, being driven by a combination of Clarke et al's (2012) romantic, *agape* and pragmatic love for the activities of knowledge-workers at a higher education level.

Through the opportunity to work in a knowledge-driven environment with a strong focus on creating new, exciting approaches, co-workers seem to extract meaning from what they do; this means that they feel intrinsically motivated by experiencing ‘moments of flow’ (Csikszentmihalyi 2004:19), autonomy (Alvesson 2000; Reinholt & Pederson 2011; Yeuk-Mui et al 2002) and self-fulfillment (Nonaka & Takeuchi 1995; Leistner 2011; Pasher & Ronen 2011).

A fourth message is that transformational leadership leads to institutional change, which in turn helps academics to embrace change (Shattock 2003) in order to find new ways of communicating with one another. Indeed, leadership is a key area for successful knowledge-creating organizations (Nonaka & Takeuchi 1995). In order to be transformational, the leader as a distinct figure seems to be particularly important in moments of crisis, as such leaders are seen as ‘people who can mobilize followers in some magical way’ (Grint 2010:93). Successful leaders seem to inspire others through their vision. According to the Italian management professor Roberto Verganti, ‘the next decade belongs not to those who generate ideas but to visionaries who will build arenas to unleash the power of ideas and transform those ideas into action’ (Gallo 2010:76). Nonaka & Takeuchi’s (1995) conclusion on this might be that institutional leader makes a difference in the knowledge-creating organization. If he/she is a charismatic and transformational leader (Grint 2010), a shared organizational identity may be communicated through their person.

A fifth and final message is that such organizations seem to work best if their size is limited. Organizations of up to three hundred employees seem to work the most successfully because ‘people know one another well enough to have a reliable grasp of collective organizational knowledge’ (Davenport & Prusak 2000:17).

In summary, HEIs could learn from Nonaka & Takeuchi’s work by viewing knowledge as their most important asset, and by valuing their knowledge-workers for their individual ‘tacit’ knowledge, since its value increases when shared across boundaries and across all ontological levels. This attitude would give rise to a knowledge-sharing approach of inclusion, of trans-disciplinary thinking and of transformational leadership, where the focus is less on managerial issues and more on a renewal of the ancient Greeks’ *agora* approach, of listening and talking to one another in order to work towards a common, shared vision (Kezar & Eckel 2002). Knowledge-sharing aims could become the collective objective, and dialogue the basis for the institution’s – and its workers’ – higher purpose (Palmer et al 2010). Like other industries, therefore, HEIs should invest in strategies which enable their knowledge-workers to share, create, and disseminate knowledge. By reading the literature critically, however, it seems evident that the success of knowledge-creating institutions seems to depend on their size (Davenport & Prusak 2000; Swart

2008) which should not exceed three hundred workers. This is a reality for very few HEIs as most would be larger in size and this, therefore, makes them less conducive for such knowledge-sharing processes.

On another note, HEIs seem to be tied to institutional traditions (Valimaa 1998) where academics seem to identify more with their discipline rather than with their faculty, hence their institution (Henkel 2000). Professional managers, however, identify more with their profession than with academia (Bacon 2009). On the other hand, the additional pressure for academics to respond to increasing 'demands of accountability and performance, rather than professional pride' (Clarke et al 2012:13) has a changing impact on their individual academic and institutional identity. Their lack of autonomy (Menguc et al 2011) seems to result in frustration and loss of their 'unconditional' love for their academic work (Clarke et al 2012).

According to the literature I have discussed above, it seems that HEIs should see it as their major task to engage in strategies which foster tacit knowledge activities across all ontological levels. Although, as it appears, such activities are more easily applicable in smaller environments, it may help all higher education institutions to invest further thinking into how best to create a knowledge-sharing environment which puts its emphasis on the creation of what is called 'ba' in the eastern philosophy (Nonaka & Takeuchi 1995).

I will now discuss how such 'ba' could be realized.

2.6. The concept of 'ba' which facilitates tacit knowledge sharing strategies with the aim of creating new competitive niches at higher education institutions

There is agreement among many scholars that the creation of an institutional culture - a knowledge-enabling environment (ba) - 'is the prime driver of organizational performance' (O'Toole 2014:78). In such an environment coworkers learn to open up by engaging enthusiastically as they feel valued and connected with others (Newport 2012) and, therefore, committed to add value to the institution by having an impact on the institution's culture 'at its root level: the behavior of its employees' (O'Toole 2014:79). They understand that the unique perspective of each co-worker's tacit knowledge may, through routines and practices such as formal and informal conversations, individual and collective active reflection, the use of mental mapping, brainstorming sessions, debates, story-telling and the use of metaphors (Ambrosini & Bowman 2008) may alter the outcome of a collective construction (Naidoo & Jamieson 2007). A knowledge-enabling culture puts an emphasis on facilitating employees working together as there is a clear understanding that

individuals ‘and what they do matters’ (Helfat et al 2007:1 in Ambrosini et al 2009:3). This seems to happen by understanding cultural, disciplinary and personality-based differences in order to engage both academic and professional managers to see themselves as artists who are able to construct something through a collaborative enterprise. Such a ‘ba’ helps co-workers ‘adapt to different team members’ cultural norms and when to set a strong team culture to supersede those norms and bring everyone on the same page’ (Rizk 2014:11). Such a culture is based on organizational routines and practices as mentioned above ‘which may become embedded in the firm over time’ (Ambrosini et al 2009:6).

Based on the literature study and the exploratory investigation within a small newly created university, I intended to underline the importance for such an institution to nurture the tacit knowledge flow between all institutional members across all hierarchical levels; most importantly, however, between academic and professional managers and across all disciplines (Wenger 1998; Lave & Wenger 1991; Glisby & Holden 2011; Stone 2013), because knowledge is mainly created in the minds, hearts, and bodies of all individuals in the first place (Nonaka & Takeuchi 1995). In addition, through engagement, participation and involvement in the world around us; ‘knowledge creation is’ also ‘social construction’ (Oztok 2012; Lave & Wenger 1991).

I agree with Leistner (2010) who argues that knowledge cannot be managed as tacit knowledge exchange can only be facilitated by creating a knowledge-sharing enabling environment which puts a special emphasis on the social dimension of the organization (von Krogh et al 2000). Nonaka and Konno (1998) define such a place as ‘ba’ - ‘a place where knowledge can be created, shared and utilized’ (in Oztok 2012: 2011). Von Krogh et al base their definition of ‘ba’ on the concept of the French sociologist Pierre Bourdieu who defines such a space as ‘the habitus’ (2000: 152). Ba seems, therefore, to be a place where people are encouraged to share their respective tacit knowledge. This may also happen at random, as in a ‘garbage can model’ where there is space for chaos and creativity; people are encouraged to meet informally in order to create something new out of the old or/and to put order into the chaos (von Krogh et al 2000; Wenger 1998; Lave & Wenger 1991). It is about creating the right context for tacit knowledge to flow across the levels as ‘tacit knowledge is the most important source of innovation’ (von Krogh et al 2000: 176).

2.6.1. Where does the concept of ‘ba’ come from?

The concept of ‘ba’ comes from the ancient Egyptian philosophy which used two terms: one was related to the soul, afterlife and the immortal state of existence (the ‘ba’) while the second was related to the here and now, the physical world, body and spirit (the ‘ka’). The Egyptians

understood the two dimensions as connected elements; one could not live without the other. They did not see life as a fragmented entity, but as a connected whole. As such they lived each day with a complete devotion to both the ‘ba’ (the soul) and the ‘ka’ (the spirit); the unrevealed and the revealed; the unknown and the known (<http://www.alchemylab.com/ka.htm>). They perceived everything as interconnected and based on metaphysical grounds (Polanyi 1966). There was an understanding of the world which was based on grounds one believed in; it was based on faith and trust. By trusting the given forestructure – the absolute knowledge – or the ‘Erkenntnis a priori’ (Kant 1966), one could believe that also her/his ‘ba’ (soul) would continue to live in the afterlife as, according to this Egyptian philosophy (a concept also known in the Eastern philosophy of Buddhism, Zen Buddhism, and Hinduism), there is no beginning and no end.

If we wanted to transpose the concept of ‘ba’ to the current study, we may say that ‘ba’ is a place where there is an understanding for both the known and the unknown; where the unknown may be seen as something which can be discovered by giving a special emphasis to the tacit dimension of knowledge at an individual and at a collective level; by understanding that the hidden can be revealed if there is a culture of openness, curiosity, discovery, trust, engagement, participation, commitment and willingness and the inclination to see beyond potential boundaries (Stone 2013; Polanyi & Prosch 1976; Reichert 2006; Leistner 2010).

I will now investigate the elements within which ‘ba’ may be grounded.

2.6.2. In which elements is ‘ba’ grounded?

The first element seems to lie in a caring environment: an environment in which both the individual and the collective may realize that their participation in the knowledge-sharing and creation process are highly valued, where there is care for the respective expertise of both academics and administrators. If there is care, both groups could see one another as ‘excellent sources of important and stimulating problems, and can see that their unique insights ... can stimulate new ... discoveries’ (Rynes et al 2001: 342). At Caltech, for example, all staff are given ‘enough gold’ (<http://www.timeshighereducation.co.uk/features/caltech-secrets-of-the-worlds-number-one-university/5/2011008.article> **Caltech: secrets of the world’s number one university**) because the institution cares about their knowledge worker in such a way that they are able to pursue new knowledge with the aim of developing new competitive niches at the institution.

The second element lies in the celebration ‘of the social nature of the organization’ (Swart 2002: 11). The social dimension involves an understanding of how to interact with one another; how both professional and academic managers take interest in and relate to one another. Through such

interaction with one another ‘we learn more about ourselves, our job, our company, and the people we work with’ (Leonard & Insch 2005: 502). The more we are connected ‘with somebody emotionally, the greater the mutual force’ (Goleman 2006: 5). If there is openness to listen to one another across ontological and multifunctional levels, the individual may be able to read what is said between the lines or to attune herself/himself with one another; this might lead into a process which Stone calls ‘turning the soul around’ (Stone 2013: 507) as they learn to view the problem from the other person’s point of view. By such indwelling in a cross-boundary ‘third space’ (Whitchurch 2008), collaboration may result in what Stone (2013) calls interactional expertise where ‘sharing tacit knowledge could increase the quality of communication among members of a community through accumulation of similar personal values, perspectives, and artefacts’ (Oztok 2012: 25). This leads to the creation of collective organizational knowledge that may result in collective action (Oztok 2012). At Caltech, for example, the interaction takes place across traditional disciplinary boundaries and is kept easy and natural. They call it a ‘cross-fertilization’ which has become ‘the fabric of the place’ (<http://www.timeshighereducation.co.uk/features/caltech-secrets-of-the-worlds-number-one-university/5/2011008.article> **Caltech: secrets of the world’s number one university**). The culture is perceived to be unique, and tacit knowledge sharing takes place over a cup of coffee. The interaction between academics and professional managers is short, fast and based on reciprocal respect and trust.

The third element might lie in a culture of trust and openness where both academics and professional managers are willing to celebrate the unknown; where all participants in the knowledge-sharing process are willing to trust one another and where they are encouraged ‘to stretch their talents from the known to an exploration of the unknown’ (von Krogh et al 2000: 95) in order to create something new. Such a culture does not hide away from a risk-taking attitude – failure may be seen as something positive; as something which may help the unexpected to happen (Nonaka & Takeuchi 1995). Such a knowledge culture is not tied to deadlines; but rather allows their employees to experiment, discover and trust the process; to take time for reciprocal conversations and dialogue which may result in a common understanding of collective goals (Pasher & Ronen 2011).

This leads to the forth element of knowledge enabling ‘ba’: a ‘culture that nurtures innovation and entrepreneurship’ (Slater & Narver 1995: 1). Through this, a special emphasis must be given to the use of language; language shapes the way we understand and the way we interpret a situation individually and collectively; language has an impact on our behavior. On the basis of a shared

language between academics and professional managers regarding their use of words, symbols and sentences, they may be able to collaborate accordingly. In the process of interactional expertise (Stone 2013) or in the process of coupling, as Glisby & Holden (2011) call it, ‘effective interfacing might be reached’ since through multiple interpretations from different perspectives ‘alternative action plans for constructive discussion, new insights leading to generative learning may be developed’ (Slater & Narver 1995). As an example, a private HEI called ‘learn by doing’ can be mentioned which pairs its fellows with mentors for a two-year apprenticeship where they have time and space to meet on a regular basis in order to learn from one another and to create something new reflectively (Barber et al 2013). The component of giving co-workers time to reflect (von Krogh et al 2000) and an environment where there is space for the wonder and joy of learning (Kofman & Senge 1994) may result in the creation of new competitive niches at HEIs.

The fifth element of an attractive ‘ba’ might lie in the intellectual environment. Qualified professionals (in the first place, academics) are attracted by intellectual colleagues in the institution and beyond as well as by the communication culture of their institution. The intellectual exchange with others stimulates their knowledge acquisition and creation process. Such intellectual exposure may go beyond the collaboration between academics across disciplines, as well as academics and professional managers. Reichert calls it the knowledge region which fosters the collaboration of the ‘ménage a trois’ (2006: 17) which is based on the collaboration between universities, politicians and the entrepreneurial reality in the area. It seems that, in order to be competitive, the importance of ‘tacit knowledge flows pushes all three into one common cause’ (Reichert 2006: 17). Indeed, human capital and social capital may be seen as the core elements for competition at HEIs, as Ed Glaeser from Harvard University points out, a university should be seen as ‘a mass of interconnected humanity’ (Glaeser 2011 in Barber et al 2013:26).

A sixth element of ‘ba’ lies in the infrastructure, its size and its resources (Davenport & Prusak 2000; Ronen & Pasher 2011; Leistner 2010). The physical environment can have a strong impact on connectivity and the interaction of people in collaboration (Ronen & Pasher 2011). For example, an ‘open space’ scenario where both academics and professional managers are able to meet on a daily basis may facilitate the tacit knowledge sharing process more than an infrastructure which separates the former from the latter. According to Davenport & Prusak (2000), companies/institutions which exceed three hundred people find knowledge-sharing strategies more difficult to put in place. Caltech believes that its ‘single most important aspect of its extraordinary success’ (<http://www.timeshighereducation.co.uk/features/caltech-secrets-of-the-worlds-number-one-university/5/2011008.article> **Caltech: secrets of the world’s number one university**) in being

competitive at research and teaching level lies in its small size, which obliges the institution to operate in interdisciplinary and cross-disciplinary terms. The success of Oxbridge, I would argue, lies certainly in its organisation around colleges of a manageable size which function as micro-realities where people get to know one another and engage in different academic and social activities which bring both faculty and students in conversation and which leads to promising outputs. The focus goes beyond the standardized programme as it facilitates knowledge sharing at all levels. As such, the university may be seen as ‘the speech of people’ as John Dos Passos defined it (Dos Passos 1966 in Barber et al 2013:26). Such setups allow people to connect easily with one another and to form communities of practice according to their common field of interest by enabling and promoting ‘breakthrough thinking and creativity’ (Ronen & Pasher 2011: 92) which, eventually, results in the creation of new competitive niches by also using ‘cyber ba’ (von Krogh et al 2000: 258) in order to enhance the knowledge flow.

The seventh element of an attractive ‘ba’ can be seen in a strong corporate or institutional identity with a clear collective vision that is known and shared by all parties. The tacit knowledge-sharing activities between both academic and professional managers may lead to a more recognized and established institutional identity with an institutional culture that determines its values, attitudes, aspirations and vision, with which all managers are able to identify. It is a process of interactional expertise between the different reference groups that ‘avoid fixation and keep options open’ (Valimaa 1998: 134). Together they create a culture of collective social and professional interaction that results in mutual engagement and culminates in a ‘negotiated joint purpose’ (Handal 2008, in Bacon 2009: 14) by using ‘a shared repertoire of resources and practice’ (Handal 2008, in Bacon 2009: 14) and by ‘dwelling in the experiences, perspectives, and concepts of other participants’ (von Krogh et al 2000: 58). By doing this, they may develop shared tacit knowledge which, eventually, moves them from their own interest to the interest of the group (Goleman 2006). Although both academics and professional managers might still identify more with their own professional discipline, the institutional identity might become the driving force for all staff working at higher education level. A strong institutional identity with which both academic and professional managers can identify has been proven to lead to them to be more proactive, more committed, more inclined to share their individual knowledge in order to move towards innovation (Gioia 1996). As an example for a clear vision, Stanford University with its focus on innovation may be mentioned: it has course offerings such as those on start-ups ‘where students are in fact starting up companies’ (Barber et al 2013:30). This has led to a stronger identification with the institution.

The eighth element of an attractive ‘ba’ consists in the appointment of ‘knowledge brokers’ (Reichert 2006) or ‘knowledge activists’ as von Krogh et al (2000) calls them. Such professionals are individuals who are able to connect people with one another to identify a common vision; to establish who works best with whom; who breaks down boundaries; who functions as bridge-builders between participants; who encourages the conversation among others; who understands that knowledge creation is a social construction and can mobilize their energies accordingly (Reichert 2006; von Krogh et al 2000; Oztok 2012) in order to facilitate shared participation (Lave/Wenger 1991; Wenger 1998). Such professionals may also be called ‘synthesisers’ (Barber et al 2013:17) as they are able to see the world as an interwoven enterprise by ‘translat(ing) the synthesis into action’ (Barber et al 2013:17). This means that knowledge goes beyond scholarly written articles, it is about reading reality through different lenses, such as face-to-face tacit knowledge sharing practices as well as through blogs, tweets, videos, messaging; in short, it is about connecting with people.

It seems, then, that a knowledge enabling space, called ‘ba’, focuses on both the individual and the social dimension of tacit knowledge-sharing and creating by building a culture based on care, trust, innovation, a shared and collective identity and vision, a knowledge-sharing attitude which is embedded in each individual and in people working together in what Etienne Wenger (1998) calls communities of practice. It may manifest itself in open dialogue and conversations across boundaries at formal and informal levels, in the use of resources such as ‘cyber ba’ and in the establishment of an intellectual environment which may develop in time. It may also be based on an understanding of knowledge from a holistic point of view, hence, from a perspective which reflects on knowledge from different angles and which is open to intuitive insights as these may lead to the discovery of new niches simultaneously (Polanyi & Prosch 1976). Therefore, each of the components mentioned above may be seen as stepping stones towards the establishment of an attractive ‘tacit knowledge-sharing’ environment (‘ba’) and as such it may be seen as a long and ongoing process.

I will now present the leading research question as well as the sub-research questions which helped give the thesis a clear focus: on the definition of tacit knowledge, its value and the elements which may function as enablers for such knowledge to flow. This is outlined in the next chapter.

3. Research Questions

The research question ‘How does tacit knowledge create competitive niches at HEIs?’ aimed to narrow down the field of research in order for me as a researcher not to get lost in too many details

(Bignold 2012), and to allow me to read the details in such a way that new insights could be extracted (Vince/Warren 2012). It helped me keep track of what I was interested in most by pursuing my research in such a way that an initial structural framework and a clear focus could guide me through the research process by facilitating the literature search accordingly (Bryman 2012). Indeed, usually the general ‘research question’ is tied to, prompted by and/or stimulated by existing literature (Bryman 2012). Since the question is kept more on a general level, sometimes it may shift during the research process (Eisenhardt 1989). However, that has not happened in this case. It rather prompted the sub-research questions at a later stage as is outlined below. The research question was designed to test and/or to develop the SECI model in an HE setting as mentioned in chapter 2.

The concrete research question of my thesis, 'How does tacit knowledge transfer create new competitive niches in HEIs?' has helped narrow the topic into the following main theoretical components:

- a) A reflection on the notion of knowledge by comparing both the positivistic knowledge and the constructivist concept of knowledge. The focus on the latter led to the study of the value of tacit knowledge and a knowledge concept based on a holistic knowledge integrating collective as well as individual components, and an understanding of an absolute dimension which lies within reality (Capra 1984, Dalai Lama 2005; Feynman 1988; Lipton 2008; Tolle 2005).
- b) The tacit-to-tacit knowledge transfer at an HEI, by focusing mainly on what Nonaka & Takeuchi (1995) call the interaction between the different co-workers in the socialization process. As stated above, it seems evident that knowledge is ‘owned’ by each person and, by facilitating the willingness to share such knowledge, ‘Know-How’ may come ‘in’-to ‘Action’ (Swart 2011). The research question intended to analyze how this ‘Know-How flow’ may create competitive niches at HEIs, which is especially important in times of ongoing change and ongoing competition at an international level.
- c) A knowledge enabling space, called ‘ba’, by investigating on which elements an attractive ‘tacit knowledge-sharing environment may be grounded (Stone 2013; Polanyi/Prosch 1976; Reichert 2006; Leistner 2010).

- d) The study of the market situation HEIs find themselves in and its impact on the creation of competitive niches which will be outlined in chapter 4.

3.1 The study's sub-research questions

The study of the literature and the reflection upon the main research question then led to a further narrowing down through the use of the following sub-research questions (SRQs):

- a) SRQ1: What does tacit knowledge sharing mean in this organizational context?

The literature study gave me clear indications that, in order to gain clear answers to the above outlined aspects, it was important to understand whether the research participants had a common shared understanding about the notion of tacit knowledge. As we will see in the chapter on research design and methods (chapter 5) such an understanding was the starting point for the rest to unfold: as to whether the identification of enablers and barriers would help design a knowledge-enabling culture which would enhance the tacit knowledge transfer. Indeed, the second research question was:

- b) SRQ2: What are the enablers and barriers of tacit knowledge sharing?

By dwelling in this sub-research question I aimed to find out whether the knowledge of enablers and barriers for tacit knowledge to flow would indicate a strategic direction to both professional and academic managers at top management level in order for them to be able to design an organizational culture strategically where they could then function as amplifiers for such a culture to be developed. Therefore, the SRQ 3 was of key relevance in order to identify the characteristics of a 'ba' (as outlined in chapter 2) which would help create competitive niches.

- c) SRQ3: What are the characteristics of the environment within which competitive niches are created?

These characteristics were deemed to be important to identify in order to come to clear answers for FUB, but also for other HEIs to draw upon.

Both, the main RQ as well as the three SRQs led to clear findings (chapter 6) and to theoretical contributions as well as practical recommendations (chapter 7).

In chapter four I aim to give an overview of the current situation HEIs find themselves in as well as a detailed description of the specific case study setting: the Free University of Bozen/Bolzano.

4. The Research Context

The research question ‘How does tacit knowledge transfer create competitive niches in Higher Education Institutions?’ draws clearly the attention to the HE context. In this section I attempt first an outline of the particularities in which HEIs find themselves in today’s learning society and then describe the concrete empirical study of research: the Free University of Bozen/Bolzano.

4.1 The Higher Education Context

It is a reality that, especially in the past 30 years, Higher Education Institutions have undergone a huge change (Bacon, 2009; Baldwin, 2009; Gioia 1996; Henkel 2005; Longworth 2010, McInnis 1998; Shattock 2003; Whitchurch 2008). The massification of student intake, the marketization, internationalisation, globalization, the impact of the rise of technology, cuts in financial resources, the increased competitive market and changes in how universities have to be managed have all put additional demands and further pressure on the university as an institution, and as such also on all professionals working at this level (Barber et al 2013). HEIs, on top of that, find themselves also competing with other private players in the field which are not universities, but which are seen by society and students as a better option to give them the adequate competencies and mindset for today’s complex societal demands (Barber et al 2013). HEIs see themselves faced with shifting expectations which lead towards offerings that put the aspect of lifelong learning at the centre of their attention as all stakeholders ‘need to seize the opportunity to learn and re-learn throughout their lives. They need to be ready to take personal responsibility both for themselves and the world around them. Every citizen is a potential student and a potential creator of employment’ (Barber et al 2013:5). HEIs are also challenged to reflect upon the consumerist mechanisms (Naidoo & Jamieson 2007) and ‘the managerialization of the university’ as they ‘represent the most important threat to the distinctiveness of the university as an institution. If it is entirely constituted and legitimated on the basis of narrow key performance indicators, of predictably obedient economic actors’ (Parker 2014:289) and by the threat that, acting fast to the demands by students and parents for an immediate response to a ‘better and cheaper education’ (Naim 2014:65), HEIs may risk losing their competitive advantaged position if they do not act accordingly upon the call for ‘pathway(s) which would have a close nexus with the economy and produce students equipped with a strong theoretical foundation and a keen understanding of its real-life applications’ (Wong 2012 in Barber et al 2013:16). It seems, therefore, that universities need to have an understanding about their own positioning by being clear ‘which market segments they may want to serve and how’ (Barber et al 2013:5).

By looking at the unique situation of business schools, for example, the market ambiguity lies therein that the business world does not care how the schools 'are organized internally, whether sufficient articles are published in reputable magazines, what liaisons they have and what research is being done. That's their problem. The outside world is only interested in the variety and quality of products they offer, the quality of their graduates and their contribution to society' (van Schaik 2010:28). It seems that the business world is interested in 'Maven' individuals who are 'active gatherers of new trends, ideas and data and have the key skill of identifying which of them may transform the world' (De Onzonol 2010:21). As such we may say that the market situation is context-specific. While the consumerism mechanisms put a lot of pressure on more vulnerable institutions in the UK and in other countries, such as in the context-specific situation of the thesis' field study, this may apply only partially considering that the institution is hugely financed by the public sector and tuition fees are low (see section 4.2). At FUB as we will see in section 4.2, it is more about making the link between practice and theory and making sure that, through the integration of both theory and practice, local and eventually more global societal matters may be addressed (Kozminski 2010).

However, generally speaking, for HEIs to be competitive and to face proactively the huge pressure and demands coming from different sides as outlined above, they may increasingly need to evolve into successful knowledge-producing enterprises that can respond accordingly to their competitive globalized world (Shattock 2003). The pressure is not only coming from students and their families, the labour market, external stakeholders, the national state, the regional situation of the territory, and/or from external competitors, it also has to do with a shift of mindset which sees more value in the learned experience than in the attendance of a course at HE level. Examples of these include the successful school and university drop-outs, such as Steve Jobs, Richard Branson and Bill Gates, and this has an impact on the choice of how to view learning: not only tied to standardized academic programmes, but rather seen as a life-long learning journey where the focus goes on the acquisition of an integration of knowing what, knowing how and knowing why in order to become ready to respond pro-actively to the complexity of reality (Barber et al 2013). Therefore, HEIs increasingly need to evolve into successful knowledge-producing enterprises, also called thinktanks, that can respond accordingly to their competitive globalized world (Shattock 2003) by designing offerings 'which are seeking to exploit the radically changed circumstances that are the result of globalization and the digital revolution' (Barber et al 2013:18). That is why HEIs may want to reflect on what the purpose of their own institution may be in order to specialize accordingly by moving away from the traditional lecture to a multi-faced teaching and learning approach and by reflecting on which

segment they may want to build upon: the elite university, the mass university, the niche university, the local university, the lifelong learning mechanisms' (Barber et al 2013:5) as this will have an impact on which purpose the institution is more likely to pursue. This is outlined in more detail in the next section.

4.1.a) The purpose of Higher Education Institutions

There is agreement among philosophers and educationalists that the experience of education has a life-changing impact on an individual (Naidoo & Jamieson 2007; Naim 2014; Tolle 2008). Therefore the main mission of an HEI lies in learning, teaching and high quality research 'by producing, transferring and disseminating' (Naidoo & Jamieson 2007:268) knowledge in such a way that the new generation is ready to embrace the challenges of a continuously changing societal environment and that research outcomes may result in a positive impact on local and/or global societal matters (Palmer et al 2010, Achor 2010; Dillon 2014). For this to happen it appears that students need to acquire tacit skills which allow them to develop into inquiring and knowledgeable young people with a thorough intercultural understanding. HEIs may therefore need to focus on both in-depth and trans-disciplinary teaching, which, Naidoo & Jamieson call Mode 1, 'is disciplinary bound, theoretical and evaluated by peer review' (2007:276), and Mode II which 'is trans-disciplinary, applied and evaluated by both internal and external stakeholders' (2007:276) is integrated into the teaching programmes. This may result in a transformation of a person's mindset which is geared to develop both the in-depth study as well as the connection of such content with other disciplines. For this to happen the segmentation of disciplines of the Western academic reality which has been further emphasized through Weber's 'professionalized, hierarchical, and centralized structures' (Naim 2014:41) may have to be shaken in order to transform a Higher Education Institution, as Thompson (1970) postulated, 'into a centre of free discussion and action, tolerating and even encouraging "subversive" thought and activity, for a dynamic renewal of the whole society within which it operates' (Thompson 1970:166 in Parker 2014:289). Such an institution may want to see its purpose in the emphasis of the tacit dimension to emerge - where co-workers and students feel intrinsically motivated for their work as they experience that their individual contributions are seen to be important, that their tacit competencies are valued and, finally, that what they do is connected to other people's tacit dimension (Newport 2012). They then see themselves to be an important resource for the institution as their tacit knowledge is encouraged to come to the surface by asking the right questions and by giving space to approaches such as mental mapping, story-telling and the use of metaphors (Ambrosini & Bowman 2008). This eventually gives rise to a tacit-enabling culture which lies in a process that, in alignment with a variety of

scholars (Palmer et al 2010, Achor 2010, Ambrosini & Bowman 2001/2008/2009/2010, Dillon 2014) may be called a process of sense-making where the ‘academic capital’ (Naidoo & Jamieson 2007:270) lies in intellectual, cultural and societal assets by integrating economic and political assets in the long term.

Therefore, it appeared to me that a knowledge organization such as an HEI might want to look into this tacit knowledge aspect if it aims to be successful in today’s competitive market. The personal tacit knowledge may open up new horizons for an institution to connect with the creative source of each co-worker and, by sharing their ideas and by creating a knowledge-enabling environment new niches may open up and may help the institution be competitive in the market place.

This emphasizes the value of creating competitive niches in order to distinguish the institution’s products and services from others and/or to find creative ways of collaboration (Reichert 2006).

4.1.b) The creation of competitive niches

Before talking about the value of competitive niches I seek to define what a competitive niche is: it is a service, a segment, a product which is unique and attractive to promote or sell by gaining an active selling proposition (Naim 2012) and which distinguishes one institution from others by raising the question of ‘which market niche or niches to pursue’ (Barber et al 2013:29). Such niches may take place at the boundaries of disciplines, by stepping away of the traditional thinking in ‘departmental silos’ (Barber et al 2013:34). New approaches such as ‘competency-based education’ or flipped classrooms, ‘with professors acting as facilitators and activators rather than lecturers’ (Barber et al 2013:44) lead to the emergence of new unique break-through ideas which may then result in the creation of new competitive niches. Due to their uniqueness it is hard for anybody to imitate or replicate such products/services as they emerge from resources which, according to the resource-based theory, are ‘resources that are simultaneously valuable, rare, imperfectly imitable and imperfectly substitutable’ (VRIN) (Bowman & Ambrosini 1998, Ambrosini & Bowman 2009/2010). A competitive niche is based on the uniqueness of its offering which in itself is based on the co-workers’ individual creative work and the use of their tacit knowledge (Pressfield 2002) as well as on the collective engagement of teams, working groups and/or ‘communities of practice’ (Lave & Wenger 1991, Wenger 1998). For a niche to be created the creative thinking and reflection skills ‘will dominate’ (van Schaik 2010:30). The fact that critical insights come to the surface seems to be an art and a craft rather than a theory, which we may call the sense-making framework (Dillon 2014) where the value of sense-making ‘is not (only) in the process itself, but in what a company

makes of its insights, how it translates them into new ideas and opportunities, and how it shapes a shared perspective on the business' (Dillon 2014:76). The competitive advantage of, in this case an HEI, will therefore lie 'in the ability of its employees to sense and integrate' (Hurst 2014:83) the respective insights of their co-workers by strategically balancing out the known, the unknown and the unknowable (Favaro 2014).

In addition, a competitive niche may not only be seen in the creation of a specific segment, a new product and/or service, but also in the employment strategy where highly qualified co-workers may want to work in a specific arena where they see their competencies and their skills valued because there is space for them to create something new by giving leverage to their own professional uniqueness. A satisfied coworker does not only love what s/he is doing, but also would go the extra mile in order to leave a legacy (Clarke et al 2012).

After this generic analysis on the market situation in which HEIs find themselves in and a reflection on their purpose in a society which is shifting towards a learning society and, hence, its impact for HEIs on how to position themselves with regards to their unique competitive selling point over other players inside and outside university level, in the next section I describe the specific field study context in detail: The Free University of Bozen/Bolzano.

4.2 The concrete study of research: The Free University of Bozen/Bolzano

The main reason for me to choose the Free University of Bozen-Bolzano as my study for research had to do with the fact that, in my view, the university may fall into what Barber et al (2013) call a niche university as well as a local university. As a niche university FUB offers academic courses based on aspect of trilingualism, an offering one cannot find elsewhere. On top of that, in the Faculty of Art and Design, for example, the learning is based on a multi-disciplinary and on an application-oriented learning approach where all students, professors, outside specialists learn together by basing the learning experience on tacit knowledge-sharing grounds. In addition, due to the geographical beauty as well as its small size, it falls into the niche university. Furthermore it has elements of a local university as it plays a 'key role in the constant renewal of the local or regional economy through the opportunities they provide for the development of skills in the workforce and for applied research' (Barber et al 2013:58) such as the academic offerings in agricultural and agro-environmental science, especially important for the local and global needs with similar characteristics as outlined in more detail in section 4.2.f. Furthermore, due to my personal contacts at senior management and University Council level, it allowed me to obtain easy access to the

institution and, therefore, it seemed the ideal place for me to conduct the empirical data gathering for my study.

This chapter will be divided into the following sections: the historical background, legal and economic considerations which have shaped the institution as it presents itself today, followed by institutional considerations with a special focus on knowledge-sharing aspects which, according to the outcome of this analysis, ultimately have an impact on the organizational structure and the way Faculties and Administration communicate with one another. The following is a visual representation of the above:



Visual representation of FUB (Figure 2)

4.2.a) Historical background

I have conducted my empirical investigation at the Free University of Bozen-Bolzano which has its specific and unique characteristics because of its peculiar linguistic, historical and political background in the region. The Province of Bozen/Bolzano became part of Italy after the First World

War in 1918 and, during Fascism, a strong wave of Italianization took place. The result is that three languages are spoken on a daily basis in the region: German, Italian and Ladin.

In the late 1960s a student campaign challenged the local Government to establish a higher education institution in the region as, at that period, students had to study either in an Italian-only or a German-only speaking environment. The majority of German-speaking higher education students went to complete their studies in Austria, while the majority of their Italian and Ladin-speaking counterparts pursued their studies at Italian higher education institutions such as the universities of Trento, Verona, Padova, Bologna and Milano. The political leaders at that time did not sustain the students' campaign as they regarded the 'Leopold-Franzens-Universität' in Innsbruck to be the 'Landesuniversität' (the university for the territory). This was due to political reasons which will not be analyzed in this thesis.

It is only recently - in 1992 - that the research centre EURAC was founded through an initiative of the Provincial Government. One of its first tasks was to develop a feasibility study for the creation of a university in Bozen/Bolzano. The reason to change direction following the initial reluctance to establish a university in the territory was due to the decision taken by 'Italy's legislator to entrust universities with the training of secondary school teachers, creating for this purpose Schools of Specialization' (law no. 341/19.11.1990), but was implemented seven years later (law no. 127/15.05.1997). Due to the fact that Austrian universities did not offer a specific teaching qualification training at university level, and Italian universities would not offer a programme which would take the linguistic distinctiveness of the region into account, and also due to the increasing demand by the local business community for qualified, multilingual and international thinking local professionals, the Free University of Bozen-Bolzano was finally founded on the 31st October 1997.

The institution has evidently been founded for local needs with a clear orientation toward the training, teaching and cultural development of the region and toward a practice-oriented research programme which aims to pull local interests to the centre of its attention (Davies 1991). According to the strategy studies of John Davies, the small newly created University of Bozen-Bolzano, at its beginning, seemed to fall into category 'strategy 3: Regional Focus of University Development' (1991: 219) as its main role lay in catering to the needs of the local community, those of teacher training and local demand for qualified professionals. In addition, the research focus was on issues of regional importance (EURAC – feasibility study for setting up the FUB) and on research findings leading into projects (such as the establishment of the Technopark which was open to both researchers and the public). Finally, its graduate and postgraduate courses were intended in the first

instance for the regional student market and a strong university/community interaction. In the past few years it seems that the University, under the leadership of its current President (in his first mandate), its current Rector (in his second mandate) and its current Governing Body (which is at the same time the Governing Body of the research institute EURAC, with one personnel exception), is constantly working towards finding opportunities that establish a strong interaction between the University and the community. Some examples of this are, firstly, the programme introduced for mature learners, the Studium Generale, which started at the beginning of the academic year 2011-2012; secondly, the “Infant Uni” (Kinder-Universität; università per l’infanzia), which offers academic courses to children from age 7 to 12 with the possibility to gain a symbolic (doctoral) degree; finally, the creation of inter- and trans-disciplinary academic courses with a special focus on the needs of the local labour market based on the principle of lifelong learning (piano triennale 2014-2016). All these initiatives aim to increase the collaboration between the university and leading local companies. It appears that it is the institution’s intention to make a positive difference in societal matters (Palmer, Zajonc, Scribner 2010). It also seems to be the University’s aim to reach the awareness of all stakeholders by establishing a culture of appreciation in order to gain high respect and good relationships (Bélanger 2007).

This led to the creation of a new statute, initiated by the current President and pursued by the Governing Body, which was published in the ‘Official Gazette’ no. 276 on the 25th November 2013. Some of the main differences compared to the previous statute included changes regarding the University’s organization plan and its collaboration with the two neighboring universities, Università di Trento and ‘Leopold-Franzens-Universität’ in Innsbruck (Austria). Both elements of this will be further discussed below. However, the stronger emphasis on the development of regional clusters of knowledge transfer and knowledge creation aims to ‘turn knowledge, skills and competencies into sustainable advantage’ (Reichert 2006:9). Indeed, it is the three Universities’ objective to develop regions of knowledge through cooperation on academic course programme as well as common research projects (Reichert 2006). This focus on inter-institutional and interdisciplinary interfaces should further establish a fruitful knowledge environment (Reichert 2006) where new competitive niches may be created (Statute 2013, art. 29).

4.2.b) Legal and economic considerations

The Free University of Bozen-Bolzano is an autonomous, non-state funded institution (Statute 2013, art. 3) situated in three locations (Bozen-Bolzano; Brixen-Bressanone; Bruneck-Brunico). This physical separation and the tendency of not having any further interaction among stakeholders

after and/or before lectures, especially at the Bressanone-Brixen campus where students commute to University, does not facilitate the knowledge transfer between the parties nor the creation of a common institutional identity that the University may aim for. This is further discussed in the next section.

The key elements of the University's mission statement are its multilingualism (in teaching, learning, research and its practical application), internationalization, an interdisciplinary approach (in teaching, learning and research beyond departmental borders), lifelong learning, student-centeredness, its vocational approach and its practical impact on the social, cultural and environmental development of the region.

It seems, therefore, that the two main elements, multilingualism and internationalization (both used four times in the mission statement), are the primary branding words of the FUB. However, the word 'multilingualism' is replaced by the word 'trilingualism' with regards to the three languages used in the institution, which are German and Italian as the main spoken languages of the region and English as the Lingua Franca used in the scientific world. The word 'intercultural', the second word next to the logo (see below), takes the place of internationalization for internationalism. The name of the FUB stated on the logo is also written in Latin, accompanied by its name in German, Italian and English, in order to reflect the European humanities tradition at higher education level.

Universitas Studiorum Bauzanensis

Freie Universitaet Bozen

Libera Università di Bolzano

Free University of Bozen – Bolzano (Statute 2013, art. 1:6)

TRILINGUAL AND INTERCULTURAL

4.2.b)i The trilingualism

The FUB has instituted a well-established language centre in order to sustain its students and its staff in their language competencies. One of the requirements in order to be admitted to study for undergraduate degrees at the FUB is that students must certify a B2 level (from the Common European Framework of Reference*) in two languages. In the third language the Language Centre offers 140-hour intensive courses in the summer prior to the start of the academic year in order to facilitate the learning of the third language. All courses except for the courses at the Faculty of Education are held in all three languages, so that students must bring their language competencies at B2 vs C1 level in year three. Accordingly, students need to certify a C1 level in their first two languages and a B2 in their third language in order to finish a master's degree course. 'The trilingual model adopted by the FUB is what makes it international as well as giving it its defining characteristic', as my interviewees seemed to agree.

This approach differentiates the FUB from other universities which also offer courses in more than two languages, such as the University of Fribourg, the University of Luxembourg and the University of Helsinki. Whereas students at the FUB have to acquire all three languages, at these three universities courses are conducted in two main languages with the possibility of some later courses in English (Luxembourg = French/English, French/German, or English/German; Helsinki = bilingual teaching in Finnish and Swedish and English introduced as extensive language at Master, Licentiate, and Doctoral levels; Fribourg = bilingual teaching in French and German, offering some programmes in English).

While the strong focus on trilingualism is a key aspect for students, the faculty as a whole does not meet this requirement. In particular, faculty members who have been appointed via the national hiring system (about 60%) do not speak all three languages. Although they sign an agreement in which they commit themselves to learn the third language that they do not already speak, there are still faculty members who do not see the need to learn the third language as their position is secured and, in a few cases, political agendas also seem to be a hindrance. However, all documents are expected to be written in both German and Italian and this is an issue particularly for the University's academics, who are expected to deliver their writings, proposals for new projects or courses in both languages. According to both academics and administrators, a geared translation service and/or a blended coordination manager would help them focus better on their core competencies. As such, the knowledge and competencies of the language centre could penetrate better into the entire university fabric by enhancing better collaboration among the respective

parties. In reality the trilingualism has not yet penetrated entirely. In addition, many documents are also not yet translated into English. Indeed, the core strategic documents (as for the Statute) and the three year strategic plan (piano triennale 2014-16) are only available in German and Italian.

4.2.b)ii Interculturalism

Interculturalism is another key characteristic of the FUB. Forty-one per cent of its faculty are international and 58 different nationalities form the student body (excluding students of the Faculty of Education as they are all from the local region). The university's curricula also put emphasis on international content and on offering international reading lists and references. The research programmes are based on collaboration with other international higher education institutions, research centers and/or companies. Various study courses and exchange programme have also been created in collaboration with other national and international universities. The newly established collaboration of the 'Euregio Bolzano-Innsbruck-Trento' (piano triennale 2014-2016; Statute 2013, art. 2:3) puts an emphasis, in particular, on knowledge sharing and knowledge creation.

However, although 41% of the faculty are international and, due to a hiring stop via the national hiring system, more international appointments have started to take place, the majority of the 70% of the international faculty members, however, do not relocate with their families to the region, 'so that there certainly is a lack of connection to the territory', observed one Governor.

Intercultural competencies go beyond learning another language; it is also around being open to the culture which comes along with the language. Milton Bennett (2004) describes individuals who practice this approach as inter-culturally competent human beings who are able to shift from a perspective of 'ethnocentrism' towards an approach of 'ethnorelativism' (2004:62). According to the Developmental Model of Intercultural Sensitivity, a person accepts, adapts to and, in the most evolved state, integrates differences. In the integration mode, an individual is able to shift smoothly from one worldview to another (Bennett 2004). This seems to be particularly important in an environment where three different languages and cultures are supposed to play an equal role at an institutional level. Such interculturalism and internationalization at its best is supposed to be intrinsic to the whole institution (Elkin et al 2005) and can be further enhanced through the recruitment of international staff members. This is one of the main objectives of the three-year plan of the institution (see below). Indeed, it puts a special emphasis on the recruitment of international academics: 'il profilo internazionale dell'Ateneo è di significativa importanza' (the international profile of the university is of significant importance; piano triennale 2014-2016:9). In

addition, the new statute puts a special emphasis on the creation and development of study programme which focus on knowledge-sharing components with other institutions (statute 2013. art. 2:3), in particular with the Euregio institutions in the first place. However, according to the outcome of my empirical study, a further emphasis should be given to the knowledge-sharing routines at an institutional level. This will be further discussed in the next section.

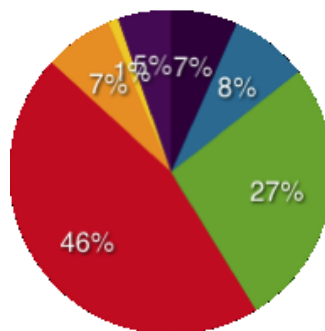
As mentioned above, the institution defines itself as a non-state funded entity. In 2014, however, nearly 81% of its funding was financed by the autonomous regional government, while in 2015 and 2016 nearly 90% will come from the regional government. About 11% of the income (*entrata proprie*) is from tuition fees (for the academic year 2014-15, this amounted to 1,343 Euros from the first year, 1,643 Euros from the second year) as well as income and contributions from other sources, largely the EU and state funding (*piano triennale 2014-16:69*). This huge percentage of public regional funding seems to have an impact on the organizational structure, as I discuss in further detail below. Indeed, according to the outcome of my empirical study, a more rigid standardized work approach has been assimilated, mainly by professional managers.

In addition, academics, especially those coming from an international setting, experience a strong ‘culture shock’ due to the political interference by the local government; this is in spite of the academic freedom that they acknowledge they have. The majority of both academic and professional managers perceive the institution as strongly bureaucratic, since it was originally structured around a hierarchical model based on a very strong administrative body, and is still laid out as such. In fact, the institution is built around 240 administrative staff and 104 academics with full-time permanent contracts and 59 researchers on temporary employment contracts (*piano triennale 2014-16:9*). This ‘percentile mismatch’ of administrative and academic staff, as well as the strong hierarchical context, has led to a perceived separation and power-concentration by both administrative and academic staff. This can also be observed in a clear physical separation of the two: the central administration building, although not far away from where research, teaching and learning are taking place, is not easily accessible as its doors are locked to external people while internal staff and students may access it by using their badges. This physical separation has led academics to feel that technical and administrative staff have little interest in academia and, therefore, little understanding of academic issues. Their interest seems to be driven by their intention to adhere to legislation which tends to give little space for flexibility. The empirical evidence confirms that academic staff feel that the power lies more with administrative staff while administrative staff, on the other hand, question their academic counterparts’ value and feel that academics have little understanding for administrative and legal issues. In their view, some

academics live in their own ‘academic bubble’. Both academics and administrators have, however, highlighted the importance of an open and ongoing communication flow among all parties in order to be competitive and efficient and in order to establish the trilingual and intercultural environment which the mission statement is aiming for. Both parties agree that the focus should now be on quality assurance rather than on quantity aspects; this is in contrast with the three-year plan which indicates a desirable increase of student intakes of 20% in the coming five years according to the growth trend of the past five years (piano triennale 2014-2016:8). Instead, both parties see the importance of giving space and time for the creation of a tacit knowledge-sharing environment. In the next section I will describe the institutional culture of the FUB with regards to knowledge-sharing practices between professional and academic managers.

4.2.c) Institutional considerations with a special focus on knowledge-sharing aspects

The FUB (Free University of Bozen-Bolzano) can be defined as a small HEI. During the academic year 2013-14 the student population was 3,375 students. A breakdown of the student population at FUB in 2013-14 (piano triennale 2014-16: 7) is as below:



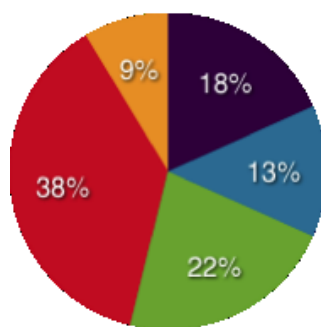
Student-population FUB (Figure 3)

Total students:	3,375
Faculty of Science and Technology:	225 (7%)
Faculty of Computer Sciences:	264 (8%)
Faculty of Business and Management:	902 (27%)
Faculty of Education	1,535 (46%)
Faculty of Design and Art:	235 (7%)
Studium Generale:	180 (5%)
Senior Students:	34 (1%)

The majority of the student population is enrolled at the Faculty of Education which is situated in the city of Brixen-Bressanone. Considering that 120 of the students of the Faculty of Business and Management are reading the bachelor course 'Tourism, Sport and Event management' at the location of Bruneck-Brunico, only 1,506 students are studying at the main campus in the heart of Bozen-Bolzano. As mentioned above, however, the majority of the students in the Faculty of Education comprise mainly local students, with nearly no international intake, and they only commute to the University for lectures and then return home for their remaining free time.

The student body is guided through their studying by 104 full-time academics and 59 researchers, and this will increase in 2016 to 142 full-time academics and 105 researchers (see table below); the latter are employed on temporary employment contracts (piano triennale 2014-2016:11). On average the student-teacher ratio is 1:6 and, as such, the University ranks among the best non-state funded universities in Italy (in 5th position in 2014, according to the 'Il Sole 24 Ore' rankings). The University takes pride in many other additional elements: its high-standard infrastructure (the university library has been ranked in 2nd position amongst German-speaking states, according to the library ranking system issued by German library networks, BIX project, in 2009); its trilingual offerings; its geographical beauty, its improving standard in Italian and international rankings concerning its international orientation; its language-orientation; its success in the high ratio of students entering the labour market; its teaching; its focus on research achievements and their implementations; its low fee structure, as mentioned above; and, in recent times, its regional collaboration with the other two neighboring universities: Università di Trento and Leopold-Franzens-Universität Innsbruck, and the three universities are seen together as 'prime producers of knowledge' (Reichert 2006:16). This led to an increased interest and intake by international students and staff alike, with the exception of the Faculty of Education, for the reasons mentioned above.

Current academic staff on permanent contracts at FUB (situation 2013-14; piano triennale 2014-2016:9):

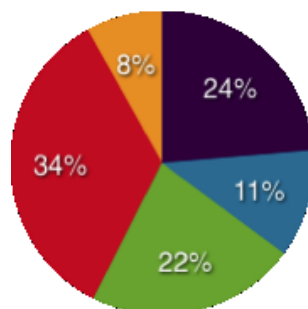


Current academic staff (Figure 4)

Total academic staff (on permanent contract); 104

Faculty of Science and Technology:	19 (18%)
Faculty of Computer Sciences:	14 (13%)
Faculty of Business and Management:	23 (22%)
Faculty of Education:	39 (38%)
Faculty of Design and Art:	9 (9%)

Academic staff on permanent contract in 2016 (objective 2016; piano triennale 2014-2'16:11):



Academic staff in 2016 (Figure 5)

Total academic staff (on permanent contract): 142

Faculty of Science and Technology:	35 (24%)
Faculty of Computer Sciences:	17 (11%)
Faculty of Business and Management:	33 (22%)
Faculty of Education:	51 (34%)
Faculty of Design and Art:	12 (8%)

It would seem, considering the small size and relatively small number of staff members at an institutional and/or faculty level, that, in relation to our core research question, knowledge-sharing would result in short lines of communication (Davenport & Prusak 2000) which would create an institutional culture based on dialogue, trust and common identity (Clarke et al 2012; Kotler 2010; Leistner 2010; Mintzberg 1998). According to Shattock (2003), reciprocal conversation is important to create competitive niches.

My empirical study has revealed that both academics and professional managers have a strong understanding about the value of knowledge, its transfer throughout the institution and beyond. They also see it as one of the key driving forces to establish an institutional culture which will facilitate the collaboration between both parties. However, it has not yet become part of the institutional fabric (Swart 2008). In fact, during the observation days, as well as during the conversations with different members of both the administrative and the academic side, and during the focus group discussions, it was evident that the different parties talk about one another in terms of 'we and they'. This seems to imply separation, of not being completely understood, of holding different identities and of perceiving themselves as distinct entities who, instead of sharing knowledge, would rather withhold it at times (Alvesson 2000; Henkel 2000; Swart 2008). This may be not because they do not want to share it, but rather because there are not enough opportunities to do so. While the professional managers seemed focused on interpreting regulations and laws, academic managers and staff seemed to feel limited by such regulations in their academic enterprise. The latter do not seem to feel sustained by the rigid, bureaucracy-driven administrative body (Bacon 2009, Whitchurch 2008) although they acknowledge that some improvements have taken place in recent months and this seems to be in connection with the President's leadership, the new statute and its impact on the organizational structure (see section on the organizational considerations), as well as and the newly appointed General Director).

However, there is a strong desire by both parties to enhance the respective dialogue in the interest of the institution and its competitive advantage. It seems that there is an understanding on both sides to invest in the development of so-called 'third space identities' (Whitchurch 2008): identities which go beyond their boundaries of expertise; which are interested in growing into new, blended characteristics.

At the moment, the current separation between the two sides, academics and professional managers, does not seem to facilitate the creation of a strong institutional culture (Valimaa 1998; Menguc et al

2011) that would eventually lead to a commonly perceived institutional identity. It appears that, at times, there is still a culture of distrust which is not helpful for tacit knowledge-sharing processes. The administrative apparatus' more control-driven approach, as it is perceived by some academics and professional managers as well, has an impact on their attitude to work in the long run. This seems to result in a perceived loss of academic freedom and creativity.

However, due to the new statute and the enhanced collaboration with neighbouring institutions, as mentioned above, these rigid structures, routines and practices seem to be being addressed. It is possible to discern early signs of success towards a favorable future. The President's vision of disseminating a culture based on inter-disciplinary knowledge transfer (Swart 2011) in order to position the University in unique, creative, application-oriented and trans-disciplinary niches in a multilingual and international context seems to be filtering through gradually (see below). Although the institutional identity to both, think and act in trilingual and intercultural terms has already reached people's minds, it has not yet reached their hearts. Gradually, though, it seems that this distinctive institutional identity may become a common driving force; especially for new academic staff and students coming from outside.

It does not seem that there is a bold shared institutional vision (Kezar & Eckel 2002). The physical separation between academia and central administration, as well as the lack of disseminated conversation processes and practices at a whole institutional level, do not help to strengthen the institution's culture. In addition, there is not sufficient clarity among both academic and professional managers with regard to the institution's status' of what a free university is supposed to be, or of possibilities of setting itself free from possible political interferences, owing to its dependency on public funding (Clarke et al 2012; Henkel 2000; Menguc et al 2011).

Although there is an institutional culture of reciprocal respect, there are not yet routines, processes and practices in place which make each person feel valued for her/his own unique contributions (Swart 2011; Valimaa 1998). As discussed in this thesis, knowledge is within each person, is mainly tacit and can only become an institutional asset if it is shared and disseminated throughout the institution (Davenport & Prusak 2000; Nonaka & Takeuchi 1995); and tacit knowledge sharing happens if staff identify with the institutional values, the institutional vision and the institution's objectives, which have to be communicated accordingly.

Dissemination takes place through social capital which; according to Swart and Kinnie, can be defined as the 'interactions between individuals and groups within an organization (2010:66) and as such it may touch upon a 'theory of interactional processes' because such 'interactional processes

involve what people actually do' (Turner 1988:74) and how they interpret one another's knowledge. Hence dissemination happens through an engaged and committed network of co-workers who, together, are the creators of organizational/intellectual (Nahapiet & Ghoshal 1998, van Buren 1999, Swart 2008). This is the main resource for competitive advantage of an institution. In order for this to happen, the recruitment process has to shift from what I define as 'What do we recruit for': a position-driven approach, to what I define as 'Who do we want to recruit': a person-driven approach where the know-how, the competencies, the attitudes and the best suitability of the candidate will be at the centre of the recruitment process (Clarke et al 2012; Kezar & Eckel 2002). It seems that the objective of the institution in the coming three years is to attract internationally recognized experts who will furthermore attract highly qualified knowledge workers (see table above) and quality-seeking students alike. This may result in a stronger identification with the institution (Baumard 2001), a stronger commitment of knowledge workers across the various ontological levels and also the development of trust (van Buren 1999) which, according to Huemer et al (1998), seems to be the basis for self-motivated commitment. As such, tacit knowledge sharing and collaboration would not depend anymore solely on the goodwill and motivation of a few individuals, as a few key participants pointed out, but it would become part of the institutional fabric as a whole (Swart 2008): a collective culture (Brewer & Brewer 2010) where each person feels valued, and understands that new knowledge can be created collectively.

At the present moment, tacit knowledge-sharing processes and practices seem mainly to happen instinctively among those people who are interested in it. One factor which inhibits a smooth knowledge flow seems to lie in a lack of clarity and a lack of time. Competencies and core objectives are not clearly communicated, and this seems to create confusion. Many knowledge-workers perceive themselves as co-workers who have to follow standardized guidelines with little opportunity to take on individual responsibility (Clarke et al 2012; Henkel 2000; Yeuk-Mui et al 2002). According to the outcome of my empirical study, a number of highly qualified co-workers feel frustrated about these limitations and feel that their expertise is not valued enough. They would prefer more freedom, more time to meet with one another, more risk-taking opportunities and more autonomy and trust (Dhanaraj et al 2004).

It seems that there is a strong call for and desire by all top managers, academics and professional managers alike, to institutionalize knowledge-sharing processes and routines. Due to the new statute, and the organizational change which has been introduced accordingly, there is evidence of increased knowledge-sharing moments at an institutional level. However, it may become part of the institution's strategy as 'strategy sets direction' (Mintzberg et al 1998: 15), 'provides meaning' and

‘consistency’ (Mintzberg et al 1998:17), and strategy eventually has an impact on the consistency of behaviour over time. The importance of institutionalizing knowledge-sharing routines has been mentioned by all interviewees and, in addition, during the focus group discussions, all parties agreed on the importance of such practices. One of the deans illustrated the knowledge sharing strategy as follows:

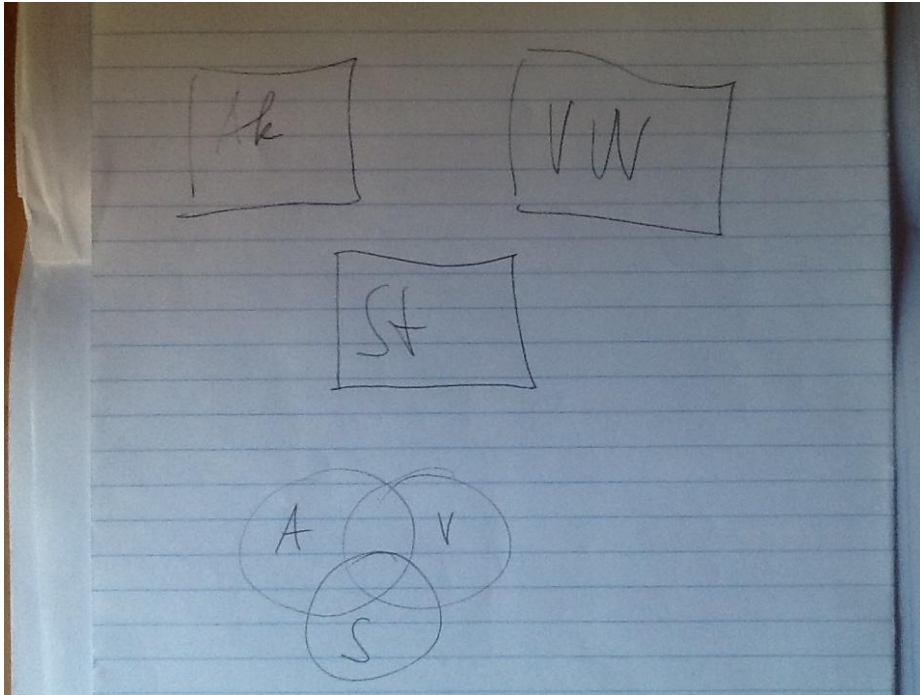


Figure 5

Ak: academics

VW: administrators

S: students

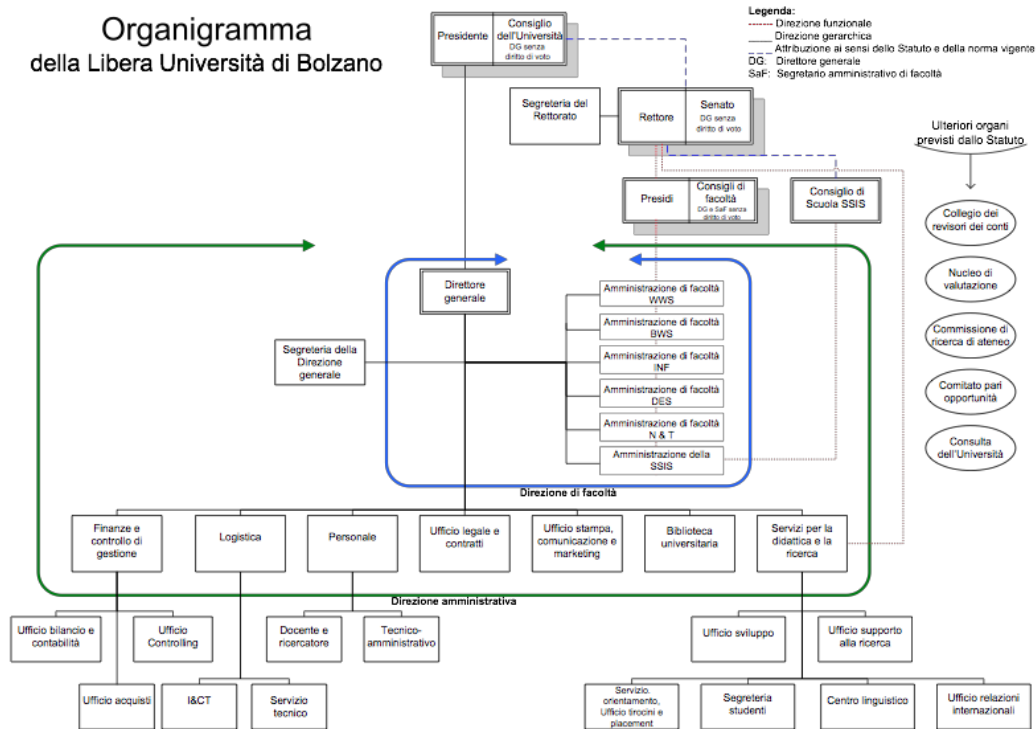
According to this specific academic manager, all parties (academics, administrators, and students) need to interact with regards to tacit knowledge sharing practices and routines and, as such, it will eventually become part of each knowledge-worker’s mind and heart (Davenport & Prusak 2000). There is shared understanding by both parties that tacit knowledge-sharing as a behavioural pattern eventually inspires knowledge-workers since it gives them meaning and motivation (Gioia & Thomas 1996; Swart 2008). With the new statute, all parties see small tentative signs by the institution to go in this direction. In the next section I will describe in more detail the organizational set-up of the institution with a special emphasis on the President’s leadership.

4.2.d) Organizational considerations

Although the university is, as stated above, a non-state funded institution, its financial resources come mainly from the local Government and from national financial aid programme. As such, the regional government embodies the role of a regional supervising system (Jongbloed 2004), and its main task lies in designing frameworks with sufficient autonomy at an institutional level. Decision-making is delegated in the first place to the University Council as ‘the highest central governing body of the University’, formed by seven effective representatives of all territorial stakeholders and their respective linguistic and cultural backgrounds (academics, students, entrepreneurs, politicians, professionals). There is also the intention to aim for gender equality (currently only one member of the University Council is female). Four out of the seven effective representatives are nominated by the local Government. Two representatives are members with rights for a consultative vote only: one is the General Director of the institution and, as such, responsible for its entire administrative apparatus, and the other is an Honorary Member who, currently, is the former long-standing President of the Province (Statute 2013, art. 5:8).

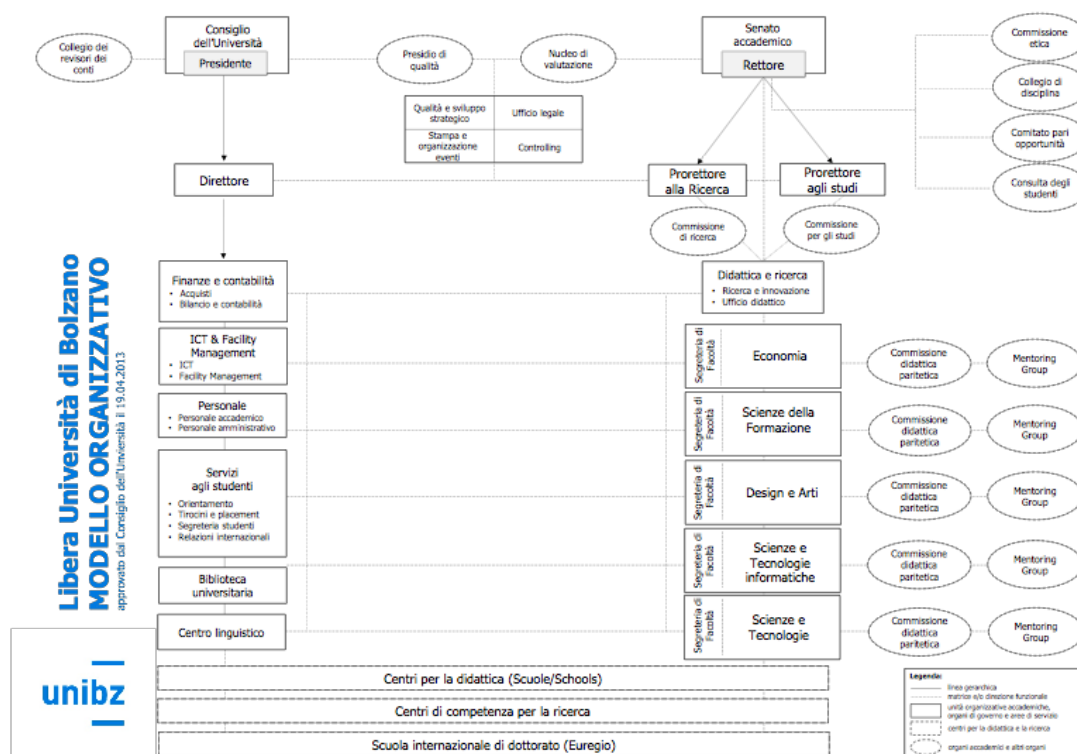
By having a closer look at both organizational charts (the previous one and the new organizational structure which has been effective since the 15th January 2014; see below) it seems evident that the direction the institution has taken is towards more clarity by focusing on the two main pillars: the administration, led by the General Director, and the academic affairs, led by the Rector (see below). However, ‘the University Council is the highest central governing body of the University’ since ‘its members decide about the general development and the finances of the University’ (<https://www.unibz.it/en/organisation/organisation/bodies/council/default.html>), while the President is the legal representative of the University and as such chairs the University Council and collaborates closely with the Rector and her/his academic co-workers, the General Director who is responsible for her/his professional staff, the regional government, and the outside world (Statute, art. 7:12-14). However, the main control function regarding financial aspects stays with the Council of Auditors which monitors the University’s spending. Indeed, both academics and professional managers view this as a threat, since it is perceived to be operated in a very rigid and restrictive way. On the academic side there is an agency called ANVUR (Agenzia di Valutazione del Sistema Universitario e delle Ricerche: National Agency for the Evaluation of the University and Research Institutes) the main purpose of which is to ‘evaluate the efficiency and efficacy of the public programmes for financing of, and providing incentives for, activities of research and innovation’ (Presidential Decree No 76 of 1 February 2010, art. 5:2). This is the ultimate body which approves new academic research projects and courses.

Old organizational chart (before the new statute approved on the 31st October 2013)



Old organizational chart (Figure 6)

New organizational structure - effective since the 15th January 2014



New organizational chart (Figure 7)

By reviewing the organizational structure of the 'Free University of Bozen-Bolzano', there seems to be no evidence of what Shattock calls a 'consistent organizational pattern' (Shattock 2003: 67), according to McNay's internal cultural models of collegium, bureaucracy, enterprise and corporation (1995). It would also seem that the institution falls into Olsen's (2005) alternative model, which he refers to as 'the university as an instrument for national political agendas' (in Pilbeam 2009: 6), since the main reason to establish the university was basically in response to the specific demands of the unique linguistic and political circumstances of the territory, as mentioned above.

In relation to the tacit knowledge-sharing aspect of this thesis, the FUB represents an interesting case study because its smaller university setting would appear to result in short lines of communication, which Shattock (2003) has indicated as a key aspect for competitive advantage. This would also result in the opportunity to work on a clear institutional identity, as mentioned above. Looking at the four quadrants, however, it seems to be evident that there is a slight bias towards the quadrant of corporation, since the dominant unit seems to be the University Council with its President, who works closely with her/his Management Team (the Rector who is

responsible for all academic affairs, as well as the General Director who is in charge of all administrative issues), and as such, as previously discussed, they are the main decision-driving forces of the institution. The recent changes regarding the organizational structure of the institution seem to arise from a proactive transformation initiated by the University Council and its President, and, in some cases, by the other departments (this will be further described in the next section). The rationale for the evaluation is through performance indicators led by an evaluation committee of three external, independent researchers and evaluation experts, as well as one internal expert nominated for a period of four years by the University Council. All these elements would appear to suggest 'that external policy makers have considerable influence over the organization and activities within the University. External political agendas affect funding sources, which in turn influence behaviours within the University, with activity being monitored within a range of performance indicators. Scholarly purposes are considered secondary to purposes dictated by political support and funding opportunity (Olsen 2005, in Pilbeam 2009: 8).

However, there are also elements of the 'collegium' quadrant that puts its main emphasis on the self-governing community of scholars who should be free to pursue their own studies and research objectives, and who should themselves be able to standardize their content and skills alongside their discipline and/or faculty (Pilbeam 2009). In the concrete context of FUB this has been the case since its establishment although the implementation of the Bologna process clearly required standardized processes. In one faculty of the institution the very structured and school model-oriented teaching approach of the Bologna model could be avoided in favor of an interdisciplinary, student-focused and practice-oriented teaching and learning model (see section on departmental considerations). In addition, the recently initiated collaboration of the three neighboring universities, Bozen-Bolzano, Trento and Innsbruck, as well as the focus on the creation of inter- and transdisciplinary academic projects and courses (such as the bachelor course in Business Informatics, planned for the academic year 2015-2016, in collaboration with the Faculty of Computer Sciences and the Faculty of Business and Management) the environmental 'fit' (McNay 1995: 109) can be seen as evolutionary as scholars can be flexible to the course requirements, course delivery and the demand of the local market.

According to the majority of both the professional and academic managers, the institution is perceived as a bureaucracy since it was originally structured as a hierarchical model based on a very strong administrative body and it is still laid out as such. In fact, as already mentioned above, the institution is built around 240 administrative staff and 104 full time academics on a permanent contract. This uneven ratio between administrative and academic staff and the historically rooted

strong hierarchical context make academics perceive themselves as being under continuous scrutiny by the bureaucratic presence around them. Academics seem to feel, therefore, that technical and administrative staff have been given too much power. On the other hand, the professional managers acknowledge their academic counterparts' frustration and argue that employees, especially professional managers, should see all stakeholders, academics included, as their customers. As such, professional managers are meant to facilitate the core service of the institution by seeking dialogue with their academic colleagues. Such an attitude seems to be in line with what Olsen (2005) calls 'the creation of such technostructures', which expects technical and administrative staff to contribute 'to the performance of the university' (in Pilbeam 2009: 8).

In conclusion, with regards to the organizational structure of the institution, it makes sense to have a closer look at the President's leadership style, which has been referred to by some interviewees as 'enlightened leadership'. Under his leadership the institution has started to undergo a period of change. At top management level, his leadership style seems to be perceived as transformational, collaborative and team-oriented. As soon as he was elected to the University Council's Presidency on the 13th April 2010, he began to work on the reorganization of the institution and the new structure came into effect on the 15th January 2014 (as described in the outline above). The reorganization process seems to have been driven by the President's view of an organizational structure that should embody, alongside collegium and bureaucracy elements, enterprise elements which place knowledge-sharing processes at the foundation of teaching programmes and research approaches and outcomes. As such, it had been his aim to put the institution at a competitive advantage at the international level. 'Knowledge is the capital of the future and, in order to create and disseminate knowledge, each person will have to start from her-/himself' (<http://www.youtube.com/watch?v=-L7y1M5Dg1o>). This was the President's motto for the University and it seems to have become the dominant value of the institution. However, due to the physical separation of the central administrative buildings where the President, the Rector and the central administration reside, it seems that there is little space for closer and more regular formal and informal interaction with the faculty. This will be further discussed in the exploratory study.

Nevertheless, the President's influence on the recent change management, as well as his vision for the future development and organizational structure of the institution, also embodies enterprise elements. The dominant value of the institution lies in its core competencies in the different faculties/schools with a transdisciplinary and interdisciplinary outlook and in a more focused collaboration across the 'Euregio' universities, as well as in the attitude to increasingly see both students and local companies as the institution's customers who should, eventually, evolve into a

unit of resource (corporation). As mentioned above, however, there is the tendency of the local Government and/or the ANVUR to sustain or dismiss new initiatives and, as such, the structure might be interpreted more as a bureaucracy or as a corporation.

According to Shattock (2003), the key role for a HEI's success lies in the role of the department, its relationship with the centre, the short lines of communication between deans and their administrative colleagues, and a dispersed leadership among professional and academic managers. Elements of all organizational structures might be the best fit for today's HEIs. At FUB, it seems, however, that there is a tendency towards the quadrants of bureaucracy and corporation: e.g. the strong hierarchical matrix model, the uneven balance between administrative and academic staff, the power of the local Government and the University Council that consists of seven effective members and two members with a consultative vote.

In the next section I will further analyze departmental aspects.

4.2.e) Departmental aspects

The Free University of Bozen-Bolzano (FUB) is organized around four Faculties and one School (Faculty of Education, School of Economics and Management, the Faculty of Computer Science, the Faculty of Design and Art and the Faculty of Science and Technology). Below I will describe each department in more detail by highlighting which strategy as outlined in Mintzberg et al's (1998) book '*Strategy Safari. A guided Tour through the wilds of strategic management*' the respective departments might be associated with. Finally I will take a closer look at the organization's administrative pillar and try to gain an understanding of how the knowledge flow at the University could be approached in order to create effectiveness and competitive niches.

4.2.e)i The Faculty of Education

The Faculty of Education was founded in 1997 and its main aim was to provide teacher training for teachers to teach in German, Italian and/or Ladin nursery and primary schools in the local territory (<http://www.unibz.it/en/education/welcome/profile/default.html>). Over the years, the Faculty has developed into one of the top departments in its field because, according to how the Faculty is presenting itself to the outside world, it undertakes excellent research which is continuously applied in small teaching-groups, the collaboration between German, Italian and Ladin traditions has led to a more integrated and intercultural understanding of education, its staff includes the presence of internationally renowned academics in the field, it takes a practical approach to teaching and it has

exposure in the unique linguistic offerings in the different fields (<http://www.unibz.it/en/education/welcome/default.html>). The campus is located in Brixen-Bressanone and the 1,535 students who were enrolled in the academic year 2013-14 were mostly commuting to the University. This means that there is limited opportunity to bring faculty, administrators and students together, beyond their lectures and workshops. The faculty offers bachelor, master and PhD courses with a specific emphasis on ‘educational and developmental processes at various life stages and in different contexts; languages and other forms of expression in a multicultural and multilingual society’ and ‘social dynamics, active citizenship and systems of solidarity’ (<http://www.unibz.it/en/education/welcome/profile/default.html>). The future plans for the Faculty lie in the creation of two new courses in each of the forthcoming academic years, which will be decided, according to the territorial needs, in collaboration with the education authorities of all three languages of the province; in the recruitment of more international academics with a stronger focus on trilingualism; and in the further development of international-oriented research topics - mostly in collaboration with the Euregio universities (piano triennale 2014-2016). The 39 current full-time academics with a permanent contract will increase to 51 in 2016.

The infrastructure is a modern and mainly purpose-built, spacious campus. However, the architecture, the physical separation between administration and faculty, and the fact that a large majority of students commute back home, is not conducive to facilitating informal gatherings, and meetings, therefore, have to be planned in advance. In fact, it seems that the school has been created around a ‘Planning School’ concept since ‘strategies result from a controlled, conscious process of formal planning’ (Mintzberg et al, 1998:58). In addition, the education authorities of the region and the political government take the main decisions in what the academic offerings are. Furthermore, according to the Dean, the rigid standards of the agency ANVUR means that the faculty has limited flexibility and freedom. The Dean mentioned the importance of finding time and methods for all stakeholders and all parties to meet in order to spend so-called ‘meaningless’ (*sinnlose Zeit*) time with one another in order to bring together people’s hearts and minds. At the moment, in his view, the focus is more on developing people’s mental capacities in the first place. As such, there is the desire to bring the faculties, administrative and academic staff, and students together more often by, ideally, the idea of moving the campus to the main campus in Bozen-Bolzano.

4.2.e)ii The Faculty of Economics and Management

The Faculty of Economics and Management was founded in 1998 at the main campus in Bozen-Bolzano in order to respond to local needs of the labour market. Since its foundation, the faculty has developed into a strong national and international university setting: ‘its multidisciplinary and

multilingual study programmes are recognised both in Italy (3rd in the 2013 ranking of La Repubblica) and in Germany (top mark in the 'Die Zeit' rating for internationalisation)'. 'The School has also been recognized as one of the best in Italy for its research (4th in Economics, 2nd in Law and Political Science according to ANVUR)' (<http://www.unibz.it/en/economics/welcome/default.html>). In the academic year 2013-14, the faculty catered for 902 national and international students with a complement of 23 full-time academics on a permanent contract, which will increase to 33 academics in 2016 (piano triennale 2014-2016). The faculty offers its all its courses at the main campus in Bozen-Bolzano except for one course (tourism, sport and event management) which is offered in Bruneck-Brunico which is located roughly 80 kilometers from the main campus. This physical distance is not ideal, since only formal meetings can be organized and knowledge flow is dependent on planned scheduling. The faculty, on top of enhancing in-house collaboration between the different fields and academics and faculty administration, is geared towards the creation of more trans-disciplinary programmes. It is intended that in 2015-2016 a new bachelor course in Business Informatics will be available. The faculty's core objectives lie in the former and in the further establishment of informal groups of research, such as Communities of Practice (Wenger 1998), with a multi-disciplinary outlook and an ambition to be constantly present in the international research arena (piano triennale 2014-2016). It seems that the school has been created around the 'Positioning School' concept, since it was meant to 'serve the narrow market segment' (Mintzberg et al, 1998:103) of territorial needs and has gradually developed into a 'cognitive school model' where the specific scenario 'can be modeled, [...] can be framed, and [...] can be constructed' (1998:170) and the faculty is continuously asking themselves how best they can develop their current and future research and teaching programmes. According to the Dean, knowledge-sharing in the faculty and between faculty and faculty administration is working well; however, the faculty administration does not deal directly with the General Director and, according to her, it is there where information gets lost and confusion is created. The physical separation from the central administrative pillar has caused some frustration and 'none of the faculty suggestions' (see findings) have been included in the new organizational structure.

4.2.e)iii The Faculty of Design and Art

The Faculty of Design and Art has offered a bachelor in Art and Design since the academic year 2002-2003 and, under the guidance of its current Vice-Dean, who has been in the position since the faculty was set up, has given the school its own departmental autonomy. In fact, the Faculty had the opportunity to avoid the very structured and school-model-oriented teaching approach of the Bologna Model in favour of an interdisciplinary, student and practice-oriented teaching and learning approach where students, alongside their lecturers and in collaboration with companies and art-galleries, develop their unique voices by putting their creativity to work and by leading their findings towards theory. As such the department has established strong connections with other institutions, companies and galleries where knowledge-sharing practices have led to the creation of competitive niches. This also puts the school at a competitive advantage internally with regards to its flexibility on academic offerings and research, its space allocation (the infrastructure is regarded to be excellent) and its financial support. In fact, the Vice Dean defines its work situation as excellent as ‘in our case there is always money available’ (bei uns gibt es immer Geld). ‘We only need to spend it intelligently’ (Wir muessen es nur intelligent ausgeben).

The 235 bachelor students are taught by nine full-time academics on a permanent contract, which will increase to 12 academics in 2016. For the next two years, two new courses are planned to begin in collaboration with the local Chamber of Commerce, and the research programme is mainly planned to continue as applied research conducted in strong collaboration with local and international companies and cultural institutions. With regards to the former Dean’s approach to interpret regulations in a flexible and solution-oriented way, the Faculty has been created around a ‘Design School’ concept (Mintzberg et al 1998), as the Dean’s motto was driven by the attitude of establishing a ‘fit’. Its focus is on the process rather than the product, and the ‘strategy is a grand design that requires a grand designer’ (Mintzberg et al 1998:42). In fact, such a grand designer is able to create new things by ‘truly being in the organization’ and by having developed a ‘rich, intimate knowledge base’ (Mintzberg et al 1998:43) around the institution’s needs and the broader picture. It seems that, by doing this, the Faculty is heading in a clear direction which is based on a ‘mix of scientific analysis, a trans-disciplinary approach of study, a solid preparation in art history and a large slice of creative practice’ (<http://www.unibz.it/en/design-art/welcome/about/default.html>

4.2.e)iv The Faculty of Computer Science

The Faculty of Computer Science was created at the same time as the Faculty of Design and Art. Its ‘interdisciplinary, integrated approach forms the core framework of the teaching, research and practical applications of the Faculty’ at bachelor, master and PhD levels (<http://www.unibz.it/en/inf/progs/default.html>). One of the main objectives of the Faculty is to create trans-disciplinary academic programmes in conjunction with other faculties, such as the bachelor course in Business Informatics in collaboration with the Faculty of Economics and Management (piano triennale 2014-2016), and to reach a more internationally recognized profile through three core factors: ‘Creativity, Teamwork, and Internationality’ (<http://www.unibz.it/en/inf/progs/default.html>). The 264 students who were enrolled during the academic year 2013-14 were guided by 14 full-time academic staff members on permanent employment contracts, and in 2016 an increase of three additional academics with permanent contracts is expected. The Faculty is led by a Dean who believes in the intrinsic self-motivation of people and who advocates that only by passion and self-motivation can high goals be achieved. His approach to research and teaching seems to have elements of both the cultural and the entrepreneurial school (Mintzberg et al, 1998) in strategic thinking and acting. With regards to the entrepreneurial school, the Dean seems to be convinced that a bold vision is key for success: a vision which is clearly established in the Dean’s mind when he advocates that each single person on both the academic and administrative sides should be sharing the institution’s vision and should be integrated in future development planning. All members, according to him, should gain meaning from what they are doing and should be in an environment where risk-taking is part of the institutional culture. As such his approach could be seen in line with Mintzberg et al’s ‘Cultural School’ as people create together a ‘shared meaning over time’ (1998:274). ‘This is done by purely social activities, such as talking, celebrating, grieving, but also when people work together on common tasks, including the interaction that takes place between them and the resources they employ’ (1998:274). In fact, the Dean does not reside in a separate office; he receives and works in the middle of the corridor of his faculty where he conducts meetings, interacts with students, co-workers, and is open and flexible to reacting to what is going on around him. His example has a strong impact on people who encounter him, me included. In fact, according to the Dean, the senior management should not be hiding in the ‘big building’: ‘I am a believer in an informal atmosphere’ (interview extract). The Faculty seems to be driven by the willingness to win ‘hearts and minds’ of all stakeholders and ‘to nurture the passion of the individual’ by talking to one another.

4.2.e)v The Faculty of Sciences and Technology

The Faculty of Sciences and Technology was the last to be established in FUB. Its foundation was in 2007 and its key areas were in agricultural and agro-environmental science and industrial, mechanical and energy engineering: areas with a strong emphasis on specific local conditions and needs, such as ‘the management of mountainous areas, energy efficiency, food production and quality, and process and product innovation for industry’ (<http://www.unibz.it/en/sciencetechnology/welcome/default.html>). The Faculty is increasingly aiming to gain a more international profile of both its staff and student recruitment, and its research programmes (piano triennale 2014-2016). Its 225 students who attended the six academic offerings at bachelor, master and PhD levels have been guided by 19 full-time professionals with permanent contracts. In 2016, the Faculty will increase to 35 full-time academic staff members on permanent contracts. This will be the biggest increase in staffing at an institutional level since new academic courses will be implemented each year for the next three years. The main issues for the Faculty for the time being seem to be its space limitations. In fact, a further investment of 880 square metres of labs are planned to go into the creation of additional space and a further investment (of 724,000 Euros) needs to be allocated for the implementation of the new programmes (piano triennale 2014-2016). The Dean’s approach to management, teaching and research seems to reflect the ‘Learning School’ approach, where ‘strategies emerge as people, sometimes acting individually but more often collectively[,] come to learn’ (Mintzberg et al, 1998:176). This, eventually, leads to small changes which result in ‘major shifts in direction’ (1998:178). In fact, the Dean sees Faculty and the administrators as a knowledge creating company (Nonaka-Takeuchi 1995) where research and teaching should be seen in flexible terms. According to him, 20-30 % of research should go beyond one’s own field in order to facilitate inter-disciplinary and trans-disciplinary knowledge intake and sharing. In addition, he advocates the importance of creating more time for shared dialogue without any deadlines, and a shared leadership which is enacted in everybody with a special emphasis on a ‘bottom-up’ strategy. In the Dean’s view, the leader must also learn, but ‘more commonly it is the collective system that learns’ (Mintzberg et al 1998:208); this may result in a tacit knowledge-sharing attitude which, eventually, will lead – through collective collaboration – to the creation of competitive niches.

Finally, it makes sense to have a closer look at the administrative pillar which is currently formed of 240 full-time employees on permanent contracts. The top management is located in a separate building where both the President and the Rector reside, while the operational administrative staff are integrated into their respective faculties. Both the library and the office of student affairs have

been moved into the main campus in order to be close to the institution's core customers: the students. It is predicted in future to employ two new per year. While the collaboration between the operational administrative co-workers and academia seems to work well (see above), there does not seem to be an institutional culture based on an open-door policy with regards to tacit knowledge-sharing purposes between top professional managers and academics. In fact, many professional managers feel under pressure as they need to adhere to deadlines and new regulations and do not seem to understand what their academic counterparts might need most. The desire to spend more time collectively, and for an environment which focuses on the awareness of the respective roles and positions, where each co-worker operates from a team-oriented position, is shared by all professional managers who were interviewed.

4.2.f) Conclusive considerations

My choice to do the empirical study at the FUB – a journey which took more than three years – has been driven by the following aspects: Firstly, because I personally come from the geographical area and, as a student, I was forced to study outside of the region as there were no suitable academic offerings at that time. I was particularly interested to find out more about the 'young' university setting and its recently developed academic offerings. Secondly, I was able to obtain access to the setting easily since, due to personal contacts, I could arrange meetings with all members of the top management (with the only exception being the General Director): the President, one Governor, the Rector, the former Head Librarian (she left the university in 2013), all five Deans, two Vice-Deans and seven professional managers. In addition, the tacit knowledge-sharing aspect was one of my key interest areas and the small setting, according to the literature and to my own experience as Principal of a school with the same dimensions as the majority of the faculties, would facilitate short lines of communication (Shattock, 2003) and as such the university could represent a fertile terrain for the creation of competitive niches.

In the next chapter I discuss the research design and the methods I used and also address the philosophical, ethical and methodological aspects involved.

5. Research Design and Methods

Since there was not a lot of literature in the specific field of socialization, at least in the literature on higher education, I felt intrigued to dig deeper by investigating where it all starts from. The research question ‘How does tacit knowledge sharing create competitive niches?’ induced me to think that, although all four SECI quadrants (socialization, externalization, combination, internalization) are of vital importance it seemed that there must be a starting point which would facilitate the rest to unfold. The theory did not give me straight forward answers and it appeared to me that the socialization quadrant was somehow neglected. This is particularly so as the way many HEIs are managed is still based on Weber’s hierarchical and bureaucratic structures with specific job descriptions and where both academic and professional managers see themselves as separate from one another (Naim 2014).

It was my aim to fill this gap in the literature and to give some valid strategic answers to managers in order to help establish a conducive space for their co-workers to create competitive niches (products and services as well as retaining or attracting the right people) in order to gain a competitive advantage situation for their institution. The research design and the research methods aimed to support me in this attempt.

In this section it is my intention to focus firstly on the philosophical and ethical considerations a researcher needs to have when doing academic work, and then on the methodological aspects of empirical data gathering, in order to find constructive answers to the research question ‘How does tacit knowledge sharing create competitive niches at higher education institutions?’. A special emphasis has been placed on reflecting on my own role as a social researcher by explaining the ‘why’ of my chosen research format, the case study. I will then further analyze the pros and cons of a case study by representing the research question and its sub-research questions and which leading interview questions helped to extract data accordingly. Finally, I will reflect on the utility of the study regarding possible theory building and its impact on the different stakeholders (participant, organization, reader, broader audience, researcher).

5.1. Philosophical considerations

In alignment with Weber, I see human action as follows: ‘human conduct is intrinsically meaningful, and has to be ‘interpreted’ or ‘understood’ in a way which has no counterpart in nature’ (Weber 1992:ix). As such, I tried to interpret the data that I collected with an epistemological approach of ‘interpretivism’ based on Weber’s ‘Verstehen’, where understanding goes beyond the mere naturalistic gathering of data, moving ‘away from positivist models of research’ (Warren 2009:567); it implies a ‘form of empathy (in German *Einfuehlung*)’ (Wright 1978:14). This emphasizes the existence of a ‘double interpretation’: the researcher will provide an interpretation of the participants’ interpretation, since ‘the researcher’s interpretations have to be further interpreted in terms of the concepts [and] theories of a discipline’ (Bryman 2012:31). In addition, it can be stated that the use of images (in the specific case, the use of drawings) offered me further rich qualitative data with an ‘emphasis on subjective meaning creation’ (Warren 2009:567).

However, in order to be as objective as possible – ‘the researcher is human, not an automaton, the researcher inevitably affects what is learned’ (Rubin 2005:21) – I have tried to keep a critical stance throughout the process by continuously asking the question ‘How did you test your theory?’ (Popper 1978:19). In my specific study, the theory has been based on Nonaka & Takeuchi's (1995) concept of socialization with regards to tacit knowledge transfer practices and procedures at higher educational level and beyond (Bacon 2009; Giddens 1991; Henkel 2000/2005; Swart 2006/2008/2011; Whitchurch 2004/2006/2008). The research design which will be outlined below was akin to test of and then further develop the SECI model in an HE setting. In doing so, I aimed to be open to new observations, which led to a ‘give-and-take’ between theory and observation. This reflexive research approach resulted in an interplay between inductive and deductive theory building (Popper 1978; Christensen 2006). Such data analysis may be defined as interactive analysis: there has been a continuous interplay between data collection and data analysis (Bryman 2012). Indeed, I have developed my familiarity with the important literature around the main topics relating to my research question: ‘knowledge’, ‘tacit knowledge’, ‘tacit knowledge transfer’ and ‘knowledge management’ at higher education institutions and beyond. This knowledge functioned as a foundation for the data collection and analysis, which was then supported by further in-depth reading of additional literature. It is the data, however, which ultimately generated my new hypothesis:

‘The socialization aspect (*ba*) is of key relevance to knowledge-sharing processes, since all knowledge ultimately is tacit and, as such, depends on personal dwelling in the field if new

competitive niches are to be created. An institutional culture which emphasizes the importance of tacit knowledge sharing practices may break down boundaries by putting the collective objectives before the individual.’

In particular, the exercise during the focus group discussion with an emphasis on ‘looking beyond one’s own personal role’ (see below) helped participants acknowledge the respective participants more by seeing the high value such conversations can have for the benefit of oneself and the entire institution. Indeed, in the final interviews, empirical saturation in respect of the above hypothesis was achieved (Christensen 2006).

From an ontological point of view, I have read the data from the position of constructionism, which sees both the participants and the researcher as social actors who go through changes in space and time. I start from the standpoint that human beings have the power of modeling their personal and professional lives and that ‘categories such as organization and culture are... [not] pre-given and therefore [do not] confront social actors as external realities that they have no role in fashioning’ (Bryman 2012:33).

Although, from the very beginning of my research work, I have been driven by a fixed idea of what the outcome may be, I became more and more conscious of the risk of approaching the research process with such a predisposition. Therefore, I have continuously tried to keep an open mind for the unknown, through observing, reflecting, open questioning and active listening (Berg 2007), both to myself, as it is important to be self-reflective at all stages (Popper 1978), and to the participants (Weir 2012). Keeping an open and curious mind helped me to read the empirical data in terms of either theory extension or theory contradiction (Geer 1978).

The findings of the study have helped me as a researcher to extend my knowledge of the specialized topics which will be analyzed in depth below. I acquired a more sound and objective understanding of the importance of a tacit knowledge sharing environment and potential elements which facilitate the creation of an enabling ‘ba’ where the focus is on a larger and more inter-connected picture of collaboration (Palmer et al. 2010; Gallo 2010; Weber 1992; Weir 2012; Nixon 2012) where knowledge-sharing practices and procedures become an innate attitude of all stakeholders of the organization (Davenport & Prusak 2000; Nonaka & Takeuchi 1995). As a researcher I have certainly benefitted from the process in both an emotional and social dimension, improving my interpersonal and emotional intelligence as I position my findings in relation to my own opinions and attitudes as a researcher, and to those of the participants who were involved in my research

(Byrne 2011). This has also increased my understanding of people in general, their attitudes, their motivations and their social ‘embeddedness’ in a wider whole (Palmer et al 2010; Weir 2012; Nixon 2012; Stone 2010).

There is evidence that the study has also been of relevance to the participants themselves, as they have been encouraged to reflect on their own position; their way of seeing themselves as individuals and as team-members; their willingness to share knowledge with others and on the change of perspective they experienced during the focus group discussion when they were invited to put themselves in their counterparts’ shoes. This self-reflection and the opportunity to further reflect on the outcome and possible change of perspective in the focus group context (see section below) helped break through some existing boundaries by openly expressing the desire – from both academics and professional managers alike – to seek a more structured and regular collaboration at an institutional level.

To summarize the way that I have analyzed the collected data, I should say that the use of visual methods allowed me to look more thoroughly into the participants' reflection on their understanding of a knowledge-sharing organization by providing me with rich narrative data. My analysis has been led by the driving forces of interpretivism, constructionism, iterative theory by testing and/or developing the SECI model in an HE setting accordingly.

Before going into the specifics I will first reflect on the important ethical considerations in relation to empirical data gathering and theory-building, both in general and in relation to the specific research question of my thesis.

5.2. Ethical considerations

The act of social research raises critical ethical considerations, as the social scientist ‘delve[s] into social lives of other human beings’ (Berg 2007: 53). The ethical obligations apply to all possible stakeholders of the study: the researcher him-/herself, possible colleagues, the participants of the study, the organization, the reader and the broader audience. Although the ethical considerations are dependent on the personal values which ‘reflect either the personal beliefs or the feelings’ (Bryman 2012:39) of the researcher, it is important that the researcher is led by what Berg calls the ‘risk-benefit scale’ (Berg 2007:59): potential harm for the participants has to be excluded from the outset; potential risks should not have any negative impact on the participants or on a broader audience (Berg 2007). However, the personal risk of the researcher has to be evaluated by the researcher her-

/himself; the study should, in my view, be guided by the ethic of an appreciation of the other (Weir 2012).

That is why I aimed to conduct my research with an ethical stance where ‘the core and sole purpose is to put the interests of others ahead’ (Su & McGettrick 2012:1) of possible personal interests, whether this might be a data analysis led by ‘jumping to conclusions’ because I wanted to complete the process faster, or whether it might have been a data collection influenced by my personal ideas instead of listening carefully and reflecting accordingly on different view-points (Bryman 2012; Bignold 2012). I aimed to be driven by my personal and professional commitments as a researcher to put the respect for the respective ‘Other’ in the first place and to collect, interpret and analyze the data accordingly by keeping a ‘beginner’s mind’ (Gallo 2012), without neglecting the theoretical framework of the studied literature.

I am aware of the fact that I myself, as a researcher, was part of the tools of discovery (Rubin 2005), because, as mentioned above, the researcher will never be completely neutral. I see the researcher – in this case myself – as a fluid construct of personal experiences, values and belief systems in space and time (Bryman 2012; Gladwell 2008). As such, the researcher makes specific decisions regarding the research area, the formulation of the research question, the choice of the research design, the choice of the research field, the chosen data collection and data analysis strategies, the interpretation of data, the findings and the conclusions (Bryman 2012). In addition, even the methods themselves ‘are not simply neutral: they are linked with the ways in which social scientists envision the connection between different viewpoints about the nature of social reality and how it should be examined’ (Bryman 2012:19).

In my specific case, my responsibility as a researcher lay in making myself, the participants and the reader aware of all of the above considerations. Although I always tried to keep a neutral and non-judgmental position throughout the process, the selection of the topic, the research question, the sub research questions (SRQ), the methodology, the sampling, the methods of data collection and the data analysis itself had an impact on the process and on the outcome as well. I began my research with the eyes of a qualitative social researcher focused on an interpretivist/constructivist model of research, by gaining data through soft approaches such as visual methods in combination with initial and final interviews and a focus group discussion designed as a workshop with all the participants involved in the respective interview sessions (see below). All methods were based on narratives. This means that I had to be aware of the fact that soft ‘data are subject to bias, researcher effects, and socio-cultural constructions’ (Warren 2009: 572) and, as such, I was to ‘recognize, and

perhaps embrace, the influence which these factors have on the construction and reporting of research findings' (Warren 2009:572-573). Along these same lines, it seems evident that, even if I chose the same topic with the same research question, the outcome would probably be different if I had applied a positivist/objective approach or if I had used quantitative tools instead of qualitative tools, such as a survey. In that case, elements of personal relationship, rapport, direct and continuous reflexive interaction between researcher and participants would differ and, certainly, this could put a different emphasis on the data analysis and its outcome.

This means that everything the researcher does has to be seen in this light. Even her/his own research diary/case study report will be influenced by the choices s/he has made and will be making throughout the process (Yin 1981).

A huge responsibility lies also in the interpretation of the data. Through open questioning and active listening I seem to have gained the ability to theorize and 'to see patterns, and to maintain distance from the data generated' (Guillemin & Drew 2010:184). In order to approach this process in a professional manner, I aimed to gain knowledge and to learn new things with an element of compassion. 'Compassion is sharp' (Su & McGettrick 2012:ix) and it was my intention to care as much as possible for the participants and the broader audience because I feel professionally responsible for them (Su & McGettrick 2012). I wanted to be driven by a 'foundation of skills that induce respect as a basis for trust of the other' (Weir 2012:103). At the same time, I tried to be ready for the unknown as I saw my research evolve in a type of interplay between certainty and uncertainty, known and unknown, by applying tacit-to-tacit knowledge-transfer between researcher and participants on an ongoing basis (Nonaka & Takeuchi 1995; Davenport & Prusak 2000; Weir 2012). The ethical consideration was, therefore, to maintain as far as possible an astute awareness of the existence of personal bias from both sites.

This leads to another ethical element which needs to be mentioned: the research must be carried out based on reciprocal honesty. Honesty is 'a commitment to seek out truth and to act appropriately' (Bignold 2012:108) by taking 'account of the individual's or group's well-being' (Bignold 2012:108). This element of honesty refers to the researcher, the participant, the audience, the organization; in short, to all possible stakeholders of the research. It was always my aim, therefore, to act accordingly in order to extract research findings which were meant to primarily safeguard the individual's and the group's well-being.

This meant that I was to ensure that I dealt with the data sensitively by safeguarding the privacy of the participants. This is especially true given that I have used visual methods alongside other qualitative instruments (see below). This ‘raises issues of confidentiality and commercial sensitivity’ (Warren 2009:579) even further. In Italy, the article 675 of the 31st December 1996 regulates this aspect very clearly when it says: ‘Il trattamento di dati personali da parte di privati o di enti pubblici economici è ammesso solo con il consenso espresso dell’interessato’ (Art. 11, comma 1). This means that both data and pictures can only be used with the specific (signed) consent of the participant. Naturally, I applied the common practice of informing participants ‘fully about the purpose, methods, and intended possible uses of the research’ (Bryman 2012:146).

Another aspect to reflect upon is that of validity. Although my chosen research design - the case study - is very specific (see below), its outcome may be applied to similar populations, albeit with the necessary awareness and caution. The case study can also be used for a potential extension or falsification of theory. In order to obtain as much validity as possible, the data needed to be checked through triangulation. Triangulation is a strategy of gathering data through the use of different groups and different methods (Bignold 2012). In this specific case, I conducted individual interviews at the beginning, one focus group discussion and, finally, I finished with conclusive semi-structured interviews (see below). Throughout the process, I had always been guided by the questions ‘Have I gathered sufficient viewpoints?’, and ‘Have I read enough with regards to my research question and the main areas of interest (knowledge; tacit knowledge transfer; knowledge management; knowledge enabling environment at HEIs and beyond)?’.

It would seem sensible to conclude this section with Popper’s view of how a researcher should be. He claims that a researcher should be reflexive at all times (Popper 1978). This might embrace all the ethical aspects that I have mentioned in detail above: responsibility, validity, honesty, confidentiality and an astute awareness of the fact that, as a human being, a researcher may never be completely neutral. It is with these ethical principles in mind that I conducted this research.

In the next section I will describe in more detail the strategy I have chosen for the empirical data gathering of my research.

5.3. Reflections on my role as a qualitative researcher

The strategy I have chosen for this research is based on social science inquiry because social science deals with problems that arise in a ‘real world’ scenario; as such, it is ‘problem-driven’

rather than ‘methodology-driven’ (Flyvbjerg 2006). That is why it was important to identify the problem first and to then ask myself which methodology, quantitative or qualitative, will be best suited to analyzing the problem. The idea is to describe a problem in order to seek solutions (Geer 1978). Indeed, the purpose of social research lies in describing what is and what will be by aiming for normative theory-building which can impact on future outcomes, as ‘the value of the theory will be assessed by its predictive power’ (Christensen 2006: 42). As such, social study might be seen as having a transformative power over the real world (Byrne 2011). Social inquiry aims to extend the existing theoretical structure by understanding the meaning of empirical data in order to generate new theory (Geer 1978). The social researcher will be led by questions such as: ‘Where does the problem come from?’, ‘What *is* the problem?’, ‘Why did I select this specific problem?’, ‘Why is it important for a broader audience?’ and ‘Is it important at all?’ The answer to such questions will indicate which kind of problem the researcher is dealing with. Geer distinguishes between the following three problem types: a) ‘policy problems’, b) ‘problems of social philosophy’, and c) ‘problems intrinsic to developing scientific discipline’ (Geer 1978:49).

In my specific study the researched problem seems to be a ‘problem of social philosophy’, as I have aimed to analyze the willingness, the quality and the attitude of tacit knowledge transfer among academics and professional managers, which may function as a pre-requisite for the creation of new competitive niches at HEIs. This is why it has been my aim to find out how such knowledge flow may be facilitated, by making a closer examination of the current situation with regards to tacit knowledge transfer procedures and practices. I also tried to analyze whether there are conflicts between the values and driving forces for knowledge transfer of both the academic and the professional managers (Henkel 2000/2005; Whitchurch 2004/06/08). Furthermore, I tried to investigate whether the resolution of ‘the tension between Self and the Other’ (Weir 2012:98) may help to establish a new approach which will ‘transcend positivism by providing meaning rooted in a warm, human understanding’ (Fromm 1941 in Weir 2012: 99).

Since my study has been conducted in a single unique higher education setting, I have decided to use the qualitative research design of the case study with an ‘open-ended’ approach to begin with. I wanted the data to ‘talk’ to me by starting with a clear research question. At the same time, I aimed to be open for possible surprises, changes of direction and the acquisition of new insights which provided feedback to my theoretical pre-understanding (Bryman 2006/2012). As such, I approached my analysis with some theoretical concepts in mind (see below), and the collected empirical data then led me to further reading and further analysis. It was based on testing and further developing

the SECI model (Nonaka & Takeuchi 1995) at FUB by having a closer look at the socialization quadrant and the interaction between professional and academic managers at top management level.

Indeed, it is necessary to view tacit knowledge-transfer as a social and interactive process which may change accordingly. As such, I have interpreted the data with an approach of constructionism, which sees both participants and researcher as social actors who go through changes in space and time (Bryman 2012), as opposed to the view of objectivism, which sees the social actors as dependent on social phenomena 'that are beyond our reach of influence' (Bryman 2012:32).

In my view, my research topic is of relevant importance as its aim was to find out whether there is a way to bring both academic and administrative managers together in order to enhance knowledge-sharing practices in such a way that a knowledge-enabling 'ba' (chapter 2) can be designed strategically. I aimed to look for patterns, beyond boundaries (Whitchurch 2008), which put its main emphasis on the sense-making aspect of doing, thinking and acting for all participants' and the wellbeing of their organization as a whole (Palmer 2012). As such, I have found evidence for work-related individual and institutional identity-building patterns which, ultimately, are tied to a general and commonly shared knowledge-sharing attitude, based on an ethical foundation where 'the highest form of moral obligation of the individual is to fulfill his duty in worldly affairs' (Weber 1992:xii). I am aware of the strong ethical position I am taking here. However, as I myself work in an environment based on the IB learner profile (see chapter 2) where knowledge-sharing processes and collaboration are based on dialogue, it appears to me that at HEIs too a 'mindset' shift from more individualistic goals towards a commonly shared goal seems to be possible if it becomes an institutionalized strategic approach.

In the next section I will provide an overview of the research design and the research methodology by focusing on the leading interview questions which fed the research questions. I will then describe where I implemented the empirical study by analyzing the pros and cons of the case study research design and by explaining why I think that the case study design, in my view, is the best methodological choice for this specific study. Furthermore, I will provide more details about the empirical process in the surroundings and timeframes by describing the methodological tools I have been using and reflecting on my data analysis.

5.4. The empirical study

This section is divided into the following sub-sections:

- a) Research question, sub-research questions and the respective leading interview questions
- c) The case study organization
- d) Research participants
- e) Research methods
- f) Data analysis

5.4.a) Research Question, sub-research questions and the respective leading interview questions

As mentioned in chapter 3 the research and sub-research questions helped narrow down the field of research (Bignold 2012). In order to extract as much data as possible, the leading interview questions for each sub-research question I have used during the semi-structured interviews and the focus group workshop helped give a structured framework on which to draw upon. Throughout the process I kept an open mind and adapted the questions (Table 1 below) according to the reaction of the respective interviewees.

Leading interview questions (Table 1)

SRQs	Interview - focus group questions
What does tacit knowledge sharing mean in this organizational context?	<ul style="list-style-type: none"> • The prospective and approved title of my thesis is ‘How does tacit knowledge transfer create new competitive niches at HEIs? A case study. What comes to mind if you hear that? • What counts, in your view, as knowledge and how does knowledge grow? • How would you rate the importance of tacit knowledge sharing at HE level? • How would you describe the current tacit knowledge sharing practices of the institution? • What is tacit knowledge, in your personal view, and what are the main challenges regarding knowledge transfer?
What are the enablers and barriers of tacit knowledge sharing?	<ul style="list-style-type: none"> • What are in your view the internal enablers for tacit knowledge sharing? • What are the external enablers? • What can you do as an individual co-worker in order to facilitate the tacit knowledge sharing processes? • How would you facilitate tacit knowledge sharing at an organizational level? • How can faculties and administration get into discussion? • How can the entire institution get into discussion with regards to the creation of new competitive niches? • Is there scope for improvement at the FUB regarding interaction, conversation and the tacit knowledge sharing practices? • What do you think of a possible ‘open door policy’ at top management level and between academics and administrators? • At the focus group discussion we tried to reflect on the challenges of the respective co-workers in administration and academia from different angles. Is the time dedicated to such exercises useful to facilitate knowledge-sharing practices? • How shall tacit knowledge be best moved around the organization? • If you were the ultimate decision-maker what would you do in order to attract people in different capacities to the institution?
What are the characteristics of the environment within which competitive niches are created?	<ul style="list-style-type: none"> • How do you use knowledge and how do you innovate knowledge? • If you were the ultimate decision-maker what strategies would you implement to facilitate the tacit knowledge flow between professional and academic managers in such a way that new competitive niches can be created? • Can tacit knowledge transfer in your view create new competitive niches at the FUB? • What needs to be done in order to do that? • Which knowledge sharing practices, in your view, would accelerate and enhance the creation of new courses, new research areas in order to attract students and funds to university? • How can faculties and administration get into discussion in order to create something new or to improve what is already there? • How can the entire institution get into discussion with regards to the creation of new competitive niche

5.4.b) A case study organization

My research question is a 'how' question. Indeed, according to Yin, 'case studies are the preferred method when how or why questions are being posed' (2009:2). A case study is a research design which aims to analyze a real-life setting in depth (Bryman 2012). Indeed, I tried to gather as much data as possible by observing, interviewing, listening, reflecting, categorizing, associating and analyzing the empirical data extracted from qualitative strategies. This brings along an intrinsic interest in the researched field (Bryman 2012) as outlined in chapter 4. Yin defines the case study as 'an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident' (2009:18). The case study allowed me to understand the dynamics of FUB as I was interested in and willing to look at the setting from different angles by listening to the narrative of the different participants with an open-minded approach. By doing this, the complexity of tacit knowledge transfer between academic and professional managers could be revealed (Byrne & Ragin 2009) as outlined in chapter 6. The analysis of the empirical data helped to find specific patterns in the data which led to both theoretical contributions as well as practical recommendations for FUB, as outlined in chapter 7. As such, case study research is based on an inductive approach. I read the outcome in such a way that it contributes to theory-development explained in chapter 7 (Flyvbjerg 2009). Flyvbjerg calls the case study 'the force of example' or 'the power of sample' (2009:228). The advantages of the case study design lie, according to Flyvbjerg (2006), in a more nuanced view of reality; in the opportunity for the researcher to acquire skills to do good people-oriented research; in being able to identify the little things which make the difference by listening carefully to the narratives of people. This more open-ended approach is less driven by being rooted in a specific theoretical framework and more by a 'broader philosophical position that cuts across specializations' (Flyvbjerg 2006:238).

Therefore, I aimed to set out with an attitude of curiosity, open to surprises (PYP 2009) by putting the focus on a beginner's mind (Gallo 2010). In describing this attitude, Flyvbjerg cites Wittgenstein by saying, 'In teaching you philosophy I am like a guide showing you how to find your way around London. I have to take you through the city from north to south, from east to west, from Euston to the embankment and from Piccadilly to the Marble Arch. After I have taken you many journeys through the city, in all sorts of directions, we shall have passed through any given street a number of times - each time traversing the street as part of a different journey. At the end of this you will know London; you will be able to find your way about like a born Londoner. Of course, a good guide will take you through the more important streets more often than he takes you down side streets; a bad guide will do the opposite. In philosophy I am rather a bad guide' (1941 in:

Flyvbjerg 2006:239). There is a strong emphasis, therefore, on the explanatory power of narratives and on little details (Byrne & Ragin 2009). In this sense, there is a lot of potential in the use of case study research. However, there was at times also the risk that I lost clarity, as sometimes I got too involved in the process by becoming ‘bonded’ to the participants or by developing bias about what I aimed to find out (Bryman 2012). That is why it is important to understand that the outcome of this study will not necessarily be easily applicable to other populations, as each setting is unique and has to be viewed as such; however, there are a number of transferrable patterns laid out in chapters 6 and 9 which may eventually be ‘generalizable’ to theory (Bryman 2012/Byrne 2011). I cited particular pieces of evidence explicitly by using extracts of both the interviews as well as the focus group discussion. On top of that, I continuously used memos and a case study diary which I have written on an ongoing basis (Yin 2009). For the case study to be the foundation for rich and meaningful data outcomes, it is important to develop ‘sharp and insightful questions’ (Yin 2009:15) that helped me to be best prepared for the study, giving direction while at the same time maintaining the open-minded approach needed in order to complete the research.

It is for these reasons that I have chosen the case study research design for my thesis. The setting of my own research is unique and not easily comparable with other institutions worldwide. Indeed, the institution is a newly created setting (Davies 1991) which was founded in 1997, as mentioned in chapter 4 and initially set up with the purpose of training teachers for the specific region in which the university operated. Now it has increased in breadth, consisting of five faculties which are each working to establish themselves at a wider international level. The context is based on a trilingual and intercultural teaching and research approach and, partly as a result of this, the academic staff members come from a variety of backgrounds whereas the administrative staff come mainly from the region itself. In addition, the institution is small, employing 240 administrative staff and 104 full-time academics. Due to its small size it has proved easier for me to gain access to the setting as a whole, not least because of my own personal links with the President, a Board Member, and the Rector, who then helped me to meet with and introduce myself to the members of the top management in the institution.

I have also been driven to investigate this new setting because of my own curiosity, as I myself come from the region originally. On top of that, the topic itself – tacit knowledge sharing and its impact on the creation of competitive niches – is of interest to me as a professional, in my own role as Principal of an International School which is constantly seeking competitive niches in order to be prepared for a continuously growing competitive market place.

Since the 'Free University of Bozen/Bolzano' (FUB) is now in the process of finding new competitive niches in order to attract more international students and staff, it seems to be the right moment to focus on this particular context and on the research question 'How does tacit knowledge transfer create new competitive niches in HEIs?'. For me personally, over the past three years of my empirical studies at FUB on a variety of research assignments on topics such as branding, leadership, collaboration between academics and administrators, and knowledge management, it seemed evident that, with regards to tacit knowledge transfer aspects, there was scope for further development, as the institution did not seem to be adopting clear practices to facilitate knowledge sharing as a strategically implemented strategy. This led me to dig more deeply into the specific research question at the level of the thesis for the DBA, and this is the reason that I have chosen the case study as the research design for my studies.

5.4.c) Research Participants

I chose the sample of participants carefully as my choice was driven by the idea that by reaching out to both academic and professional managers at senior management level I would find the grounding for 'ba' to be amplified strategically where both would then function as amplifiers for a tacit knowledge culture to penetrate into the entire organization (Swart 2010). That is why I have decided to involve all five Deans and the same number of professional managers in the process.

The table below shows when and with whom I conducted the empirical data gathering and which tools were used to do so.

Details of data gathering (Table 2)

Date	Participants	Methodological tools	Comments
28th-31st October 2013	Vice-Dean of the Faculty of Art and Design Dean of Faculty of Economics and Management Dean of Science and Technology Dean of Education Dean of Computer Sciences Head of student affairs Vice-head of public relations Head of personnel Head of Controlling Head of ICT	Semi-structured interviews Visuals	Interviews were kept open – visuals used
27th February 2014	Vice-Dean of Science and Technology Vice-Dean of Education Head of student affairs Vice-Head of controlling Vice-Head of Public Relations	Focus group discussion – reflective workshop Visuals	Only one person was the same as the initial interviewees – one Dean did not come to the meeting although it was confirmed
30th June - 2nd July 2014	Vice-Dean of Science and Technology Head of Student Affairs Vice-Dean of Education	Semi-structured interviews	Although there were only three interviewees left, empirical saturation could be achieved

The empirical data gathering started with individual semi-structured interviews. The individual interview process helped me, to first of all establish rapport with the subjects (Berg 2007), and, by building up empathy, to understand the interviewees' standpoint (Rubin 2005) and their cultural background (Berg 2007). This is why open questioning and active listening (Weir 2012) are vital, because there is always more to extract from the interview than the subject's mere words. The 'way', 'how' and 'what' they say gives richness to the data (Bryman 2012). It is also an ethical obligation of the researcher to listen carefully to what the subject has to say. This also aligned me emotionally with the participants, allowing them to feel understood without being judged. As such,

interviewing is an active exchange between both parties (Rubin 2005) which, if done in a skillful way, helps the participant to open up towards the researcher.

It was my intention to create such an atmosphere and it seems that it has been achieved. All participants seemed to feel at ease and ready to talk; perhaps, also about their real motivations.

In the first round of interviews which were conducted in October 2013, I expected to meet all five Deans of the faculties and their five administrative counterparts. Eventually, I met four Deans, the Vice Dean of the Faculty of Art and Design (who was the former Dean) and the Heads of Student Affairs, Personnel, Controlling, ICT and the Vice-Head of Public Relations.

In the individual semi-structured interviews, although I followed a prepared scheme of topics related to my research question and the related sub-research questions (see table above) and although I acquired a pre-understanding of existing theory, I kept my questions open according to the response coming from the interviewees. Indeed, the interview questions were used more as a guiding framework during the interviews. According to the flow of the respective interviews, the interview questions were slightly adjusted, changed or shortened. In fact, I always tried to go with the 'flow' of the specific situation by approaching the research from a 'grounded theory' point of view. Furthermore, I also asked the respective interviewees to draw their current and ideal organization chart. The visual material was meant to facilitate more in-depth reflection and rapport-building.

After the first round of individual interviews with the four Deans, one Vice-Dean (former Dean) and five professional managers, one focus group discussion was held on the 27th February 2014. Since one of the Deans was not available to participate further in the research programme, I aimed to hold a focus group discussion with the four remaining Deans and four professional managers in order to keep the numeric balance. In the end, however, the group was made up of only three academics (two out of three were represented by their Vice-Deans and one Dean did not attend although I had the written confirmation) and three professional managers (two out of three were represented by the head's co-workers, and only one professional manager who was present during the semi-structured interviews attended). In the end, the focus group reality was – with one exception – a completely new formation. Interestingly, the focus group discussion was perceived by the participants as a very productive moment of reflection and knowledge-sharing between both parties. I started the discussion by giving the participants some feedback about the outcome of the interviews and by introducing the outline of the discussion. I wanted them to come into discussion

by first reflecting individually on what tacit knowledge is and what, in their personal view, the main challenges regarding knowledge transfer are. I always gave them two minutes to write their ideas down before sharing them with everybody. Afterwards I invited them to put themselves in a counterpart's position (the academic into the professional manager's and vice-versus) and to reflect on the following question: 'Now position yourself in the shoes of an academic or professional manager. What, do you think, are their main challenges?' (related to SRQ 1)

There followed a short discussion about the validity of the creation of Communities of Practice, interactional expertise, social engagement, learning organizations, collaborative action and a vision based on a shared culture where tacit knowledge-sharing is seen as a process followed in relation to Milton Bennett's DMIS (Developmental Model of Intercultural Sensitivity) (Bennett 2004). The focus group discussion (workshop) finished with some work in pairs, one academic and one professional manager together, on the following question: 'If you were the ultimate decision-maker, what strategies would you implement in order to facilitate the tacit knowledge flow between professional and academic managers in such a way that new competitive niches can be created?' (related to SRQ 2). Although the outcome of all data will be analyzed in greater detail in the findings chapter, it was interesting to discover, at this stage, that both academics and administrators gave positive feedback about their experience and their expectations: 'This was a very useful and constructive meeting' (*è stato un incontro molto utile e costruttivo*). They further expected an improvement regarding the interaction between both academics and administrators (*'migliorare interazione tra amministrativi ed accademici'*). The aim of the focus group discussion was to share with one another their personal perception as themselves and as a member of the organization, to talk about possible solutions to instigate knowledge-sharing processes with the aim of creating new competitive niches for the institution. During the focus group discussion I functioned as a 'facilitator' (Bryman 2012:501). The focus group was a valuable tool to give the 'researcher the opportunity to study the ways in which individuals collectively make sense of a phenomenon and' how they 'construct meanings around it' (Bryman 2012:504). In my research, the emphasis lay in looking for a common ground regarding knowledge-sharing processes as an individual and in a group and what would be needed to facilitate processes by which competitive niches may be created. As such, the focus group approach had offered a valuable strategy to encourage further thinking and action.

To conclude the empirical data collection, at the end of June/beginning of July 2014, I conducted final individual semi-structured interviews with the participants of the focus group discussion. The aim was to find out whether the research process had left any lasting impact on the participants and

whether the outcome may function as a resource for the implementation of a cross-role and cross-position 'ba' (see next chapter), where tacit knowledge flow leads to the creation of new competitive niches at FUB.

Due to the illness of one professional manager and because another professional manager had left his job, my final interviews were conducted with only two of the academics and one of the professional managers who had also participated in the focus group discussion/workshop. As mentioned above, there was only one participant who was present throughout the entire data gathering cycle. Nevertheless, the outcome of the data gathering showed me that empirical saturation was reached and that it was not necessary to conduct further interviews.

However, the findings were intended to function as a building block for further individual and organizational development. To this end, I intend to organize a meeting with both the President and the Rector with the intention of presenting to them the outcome of the study. I will furthermore ask permission for a formal presentation of the results to all participants who engaged in the process.

Last but not least, it is important to mention that it was not always easy as I thought it might be to gain access to the research setting. While it was easy to come to an agreement with the Rector, it took more than three months to get final permission to conduct the empirical study. This was due to the busy schedule of the President who, in addition to being President of the FUB, is also chief of many different projects. Eventually, due to the strong support given by the Rector's personal assistant I was able to bring the empirical data gathering to an end.

In the next section I will explain which methodological tools I have been using in order to be able to add to theory accordingly by having reached saturation. Saturation is reached when new data will no longer give further insight or additional dimensions to the researched theory (Bryman 2012).

5.4.d) Research Methods

The tools I have used to answer both the RQ and SRQs have been based on qualitative instruments only, as I agree with Eisenhardt's view (1989) that narratives give the researcher rich a description for theory building and/or theory development. Having in mind Nonaka & Takeuchi's (1995) theoretical framework on tacit knowledge transfer both at an individual (Henkel 2000/2005;

Whitchurch 2004/2006/2008) and at an organizational level (Swart 2006/2008/2011), I opted for the use of qualitative methods such as semi-structured interviews, visual methods and a focus group discussion. I am fully aware of the risk in using visual methods; however, I felt ready to embrace those risks because I expected such methods to help me extract more in-depth data than with only the use of interviews and focus groups alone. Of course, such in-depth data has not been easy to obtain, since it mainly depended on the participants' willingness to 'open up', which, in this case, seems to have happened.

I have decided therefore to use qualitative instruments only: visual methods, interviews, the focus group approach, written documents and my own research diary to extract data; I agree with Byrne & Ragin (2009) and Flyvbjerg (2006) that little details are extremely powerful as they may lead to a broader understanding of common patterns.

All these qualitative instruments mentioned above are tied together through language and narrative. Narratives give rich description for theory building, as 'it is only through the use of this soft data that we are able to explain theories' (Mintzberg 1979 in: Eisenhardt 1989: 587). Language is a way to express oneself, and through narrative analysis the skilled researcher might be able to understand how people make sense of their experiences, as 'stories are always told with a purpose in mind' (Bryman 2012:582). As a researcher I needed to understand that the narrative of research subjects is a snapshot of what Byrne (2011) calls 'interwoven stories' which are the person's reflection on past, present and future alongside their perception in space and time. Thus I saw it as my duty to pay close attention to what stories people tried to tell me, and how they were told, by trying to keep an open and neutral mind (Rubin 2005) throughout the process. However, this has not always been easy as I realized that sometimes I have seen and interpreted the data from my own standpoint and from the experience I have gained while working as a Principal in, what I would call, a strong tacit knowledge-sharing institutional culture (Rubin 2005). This is why I continuously kept asking myself questions such as: 'What am I learning here? What does the data tell me? Am I critical enough?' (Eisenhardt 1989; Bryman 2012). The use of a research diary, to keep 'bouncing back' my own questions, reflections and possible identification of categories on a regular basis, also helped me to keep an objective distance from the data. Indeed, the research diary continuously functioned as a piece of evidence and as a reflection opportunity in the analyzing process.

I have also decided to make use of visual methods, since, in my view, narrative based on visuals gives rich insight into the field and into the way the respective participants see themselves and their institution from an organizational point of view. In agreement with the President I decided to

conduct the empirical research at top management level focusing on all five Deans of the University and their five professional counterparts (although there are actually seven professional managers). However, for my thesis I also used my previous interviews with the President, the Rector and the Head Librarian as a starting point. This gave me the opportunity to gain a broader understanding by building on their feedback with the reflections of the Deans and the professional managers. I asked all participants to reflect on themselves both as individuals and as team members embedded in their organization, by using drawings with regards to their understanding of how an organization should be in order to facilitate tacit knowledge sharing. ‘Visual methods are research practices that explicitly use images in various ways including drawing, photography, video, film, and Internet pages. The images are either regarded as a source of data in themselves, or as a way of producing data through their use, or a combination of the two’ (Warren 2009:566).

According to Gauntlett & Holzwarth (2006); Guillemin & Drew (2010), Pauwels (2008) and Vince & Warren (2012), visual methods are an empowering approach as they prompt discussions and initiate narratives. They are a powerful form of self-expression because they help to ‘free’ emotions and they help people communicate both their intellectual and emotional understanding of where they see themselves in space and time. They help people express the ‘unsayable’ and what is meaningful to them (Guillemin & Drew 2010) as well. From my experience, I may say, that, while some of the interviewees were facilitated in such terms by the use of their drawings, others felt reluctant to use them. In that case I did not insist and acknowledged their personal preference of expression. Indeed, all participants opened up freely and it was easy to make them talk. It seemed that they trusted me and that they enjoyed the content of the interview as well. Only one participant – although having been very open during the interview – refused to participate in the focus group discussion and to continue the empirical data-gathering process. However, this specific person was willing to send a co-worker to the follow-up sessions.

The drawings helped draw my attention ‘to things that may have been missed or considered unimportant on first sight, revealing details that may be overlooked without the close observation that photography enables’ (Warren 2009:571). This self-reflection has helped participants to see themselves rather as ‘reflexive participants in life’, as Anthony Giddens sees it (in Gauntlett & Holzwarth 2006:88). In particular, after the focus group discussion the participants seemed to realize that they, alongside others, might have the power to construct their world (Gladwell 2008). As such, visual research might be defined as ‘enabling methodology: it assumes that people have something interesting to communicate, and that they can do so creatively’ (Gauntlett & Holzwarth 2006:84); at the same time, it is also a ‘participatory’ methodology as it instigates participation with

a ‘strong communicative function’ (Pauwels 2008:160). Although, as mentioned above, a few participants were reluctant to use their time for drawing (Warren 2009), the big advantages of visual methods lie in the fact that the image also functions as a ‘third party’ data gathering tool (Warren 2009:578), which helped generate talk, speeding up rapport-building between participant and myself as a researcher and thus leading to greater engagement (Vince & Warren 2012). I have come to agree with other researchers who regard visual methodology as a faster ‘path to participants’ emotional experiences’ (Warren 2009:575), as it allows the researcher to see beyond the participants’ facade; it is a doorway – through allegory and metaphors – to their personal, unconscious thoughts, and, as such, its communicative power seems to lie beyond the use of interviews alone.

Finally, the chosen sample can be seen as a ‘purposive sampling’ (Bryman 2012:418) because of their relevance to the Research Question. Indeed, it has been the aim of the research to find out how the interaction and knowledge transfer between academic and professional managers might enhance tacit knowledge transfer across the institution at senior management level and how such interaction may function as an amplifier strategically throughout the university by creating a knowledge-enabling culture which would eventually induce new competitive niches to emerge. That is why I have decided to conduct the study with both professional and academic managers.

In the next section, I will describe my approach to analysis of the data, which will emerge from a continuous interaction of empirical data gathering and literature reading.

5.4.e) Data analysis

The previous sections might have already given an indication of the philosophical grounding I have used to analyze the collected empirical data. Since it has been a ‘people-oriented’ case study, it seems to me that all data depends on how both participant and researcher interpret social action. The purpose of data analysis lies in making sense of the empirical data (Weir 2012). Indeed, to summarize the way I have analyzed the empirical data I may say that my analysis has been led by interpretivism (epistemology), constructionism (ontology), iterative theory with a continuous interplay between an inductive and a deductive approach to reading data by testing and trying to develop the Nonaka & Takeuchi’s model on knowledge creation accordingly (see philosophical considerations above).

As stated above, qualitative data analysis is not straightforward since no 'clear-cut rules [as to] how qualitative data should be carried out have been developed' (Bryman 2012:565). However, qualitative data seems a very attractive resource as it is based on narratives which need to be interpreted by the researcher. In this sense, as mentioned above, the researcher is part of the research process as well as the participant her/himself: it depends on her/his own tacit knowledge and the researcher's objectives as to which patterns s/he sees when reading data (Bryman 2012).

With such points in mind I have coded the collected data by reading it 'as potential indicators of concepts' (Bryman 2012:568) and by comparing them to see which theoretical framework they best fit in: testing the SECI model and looking for a possible development. In my interviews I mainly used the technique of open coding which allowed me to extract concepts which, throughout the process, led to the revelation of categories; in the focus group discussion, on the other hand, I used a 'selective coding' approach as I based it on the outcome of the coding from previous interviews (Bryman 2012). For example, after the coding of the previous interviews it seemed to be evident that there were not many opportunities of tacit knowledge sharing moments between academic and administrative managers. This notion led me to base the focus group discussion on a workshop approach by reflecting first on what tacit knowledge meant to every single participant and then by asking the respective participants to put themselves in the counterpart's shoes, in order to think of the possible challenges that both professional and academic managers might encounter at institutional level with regards to tacit knowledge sharing processes. The focus group discussion ended with an activity in pairs (one professional and one academic manager) by reflecting on the following question: 'If you were the ultimate decision-maker, what strategies would you implement in order to facilitate the tacit knowledge flow between professional and academic managers in order to create competitive niches?'

The final interviews were then designed on the basis of further reading of literature, rereading of the initial interviews, coding of the focus group discussion, and rereading of my personal case study diary where I continuously recorded memos which, ultimately, led to a refinement of previously extracted categories.

As stated above, my analysis was based on a constructivist approach as I agree with Charmaz (2000) that 'the categories, concepts, and theoretical level of an analysis emerge from the researcher's interaction within the field and questions about the data' (in Bryman 2012:575). As such my data analysis is akin to a test of and/or a development of the SECI model in an HE setting

as mentioned above. This also seems to be in line with my constructivist view of knowledge as outlined in chapter two.

5.5. Conclusion

In this chapter I have tried to give a more in-depth view of the methodological approach of my thesis by reflecting on the philosophical model of theory-building and on my role as a social scientist. Next, I considered which research design might be the best option for my specific research question: 'How does tacit knowledge transfer create new competitive niches in HEIs?' Then I described the study process and my choice of methodological instruments by giving my reasons for it. Being aware of the possible risk of bias inherent in my chosen process, I also reflected on possible ethical considerations. The awareness of certain limitations, such as the difficulty of ever being completely neutral, forms the basis of possible theory-building attempts.

On the other hand, and as a final point, my research has been driven by a strong desire to care about the well-being of the Other, including ethical considerations regarding responsibility, honesty, validity and personal standpoint, as well as the willingness to add some valuable theoretical and practical input regarding tacit-to-tacit knowledge transfer at an individual and a collective level.

In the next chapter I describe and discuss the findings of the exploratory study. It has, indeed, been a journey of discovery; a journey which gave some valuable answers to the research question, and which also helped to extend theory accordingly (chapter 8).

6. Findings and Discussion

My journey of discovery has been driven by an interest to find out what the properties of a knowledge-enabling socialization space may be and to explore what barriers hinder such knowledge flow as well as what characteristics make the Know How of the different co-workers circulate in order to bring 'Know How' into 'Action' (Swart 2006).

Motivated by the notion that knowledge is power and - in alignment with Drucker - 'the only meaningful resource today' (in Nonaka & Takeuchi, 1995:7), as a consequence, it appears to be the core element for a company to be successful. Therefore, I have based my research on the following main research question: 'How does tacit knowledge transfer create new competitive niches in HEIs?'. The aim of the research question was to find out whether the creation of a tacit knowledge-enabling environment (ba) may be seen as the main and most indispensable element of competitive advantage (Davenport & Prusak 2000; Nonaka & Takeuchi 1995; Swart 2008; Whitchurch 2008). The research question, together with the sub-research questions, were geared to analyze how such knowledge flow may create competitive niches at HEIs, which is especially important in times of ongoing change and ongoing competition at an international level (Shattock 2003).

Indeed, higher education institutions are increasingly in competition with one another for funds, students and societal recognition. This is now the reality for educational knowledge players such as HEIs (Davies 1991; Gioia et al 1996; Shattock 2003).

At the Free University of Bozen/Bolzano the top management has started to give more importance to the respective co-workers' tacit knowledge dimension. That is why there was an immediate open door for me as a researcher – even though I was not a member of staff at the institution - to conduct my study with all the Deans and the respective number of heads from the administrative side. Both the President and the Rector were interested in gaining a more insightful understanding of the current situation in order to use the outcome of the study to further develop the institution with the aim of increasing its competitive advantage at the regional, national and international levels.

Indeed, the outcome of the study will - as mentioned in the methodology chapter - be presented to both the President and the Rector first, followed by a presentation to all participants in order to use the findings as a stepping stone for further developments. Hence, the institutional approach seems to be driven by what Mintzberg et al (1998) call a 'learning school' as everybody may be seen as both knower and learner at the same time and as such 'it is the collective system that learns' (Mintzberg et al 1998: 208). It may then result in a tacit knowledge-sharing attitude which may lead - through collective collaboration - to the creation of new competitive niches.

In order to give the main research question a structure the following sub-research questions have helped to code the content of the qualitative data gathering into the respective sections and themes outlined below in Table 3.

Sub-research questions –sections and themes (Table 3)

Sub Research Questions	Sections	Themes
1. What does tacit knowledge sharing mean in this organizational context?	<p>1.1 Definition of tacit knowledge of co-workers</p> <p>1.2 The perceived value of tacit knowledge sharing at the institution</p> <p>1.3 The institutional culture with regards to tacit knowledge sharing practices - (ba)</p>	<p>1.1.a) Tacit knowledge is constructed 1.1.b) Tacit knowledge is not limited 1.1.c) Tacit knowledge is personal 1.1.d) Tacit knowledge is culturally embedded 1.1.e) Tacit knowledge is fluid</p> <p>1.2.a) Knowledge sharing is precious 1.2.b) Knowledge sharing is empowering 1.2.c) Knowledge sharing raises awareness 1.2.d) Knowledge sharing encourages consensus-building</p> <p>1.3.a) Lack of shared institutional culture 1.3.b) Communication constraints 1.3.c) The institutional vision requires more clarity 1.4.d) Unclear about the institution's status</p>
2. What are the enablers and barriers of tacit knowledge sharing?		<p>Barriers:</p> <p>a) the 'they-we perception' b) unclear commonly shared vision and objectives c) no commonly shared institutional culture (ba) d) physical separation between central administration and academia e) rigid bureaucratic pillar f) time constraints g) internal competition h) communication constraints</p> <p>Enablers:</p> <p>a) acknowledgement of the value of tacit dimension b) clear vision with commonly shared objectives c) shared institutional culture d) organizational structure based on cross-role, cross-departmental and trans-disciplinary collaboration and creation of interdisciplinary Communities of Practice e) creation of time – 'slow uni' approach f) decentralization and decrease of bureaucracy g) size</p>

3. What are the characteristics of the environment through which competitive niches are created?	<ul style="list-style-type: none"> a) a culture of care b) a clear institutional vision c) the celebration of the social nature of the organization d) a culture of trust e) a innovation and entrepreneurship nurturing culture f) a culture based on intellectual excellence g) the emphasis on infrastructure, size and resources h) a culture which gives space to knowledge-activists
--	--

I will start the analysis with the first sub-research question: What does tacit knowledge sharing mean in this organization?

6.1. What does tacit knowledge sharing mean in this organizational context?

The following sections and themes have been identified with regards to the first sub-research question.

Sections and Themes for SRQ 1 (Table 4)

Sections	Themes
1.1 Definition of tacit knowledge of co-workers	<ul style="list-style-type: none"> 1.1.a) Tacit knowledge is constructed 1.1.b) Tacit knowledge is unlimited 1.1.c) Tacit knowledge is personal 1.1.d) Tacit knowledge is culturally embedded 1.1.e) Tacit knowledge is fluid
1.2 The perceived value of tacit knowledge sharing at the institution	<ul style="list-style-type: none"> 1.2.a) Knowledge sharing is empowering 1.2.b) Knowledge sharing raises awareness 1.2.c) Knowledge sharing encourages consensus-building
1.3 The institutional culture with regards to tacit knowledge sharing practices - (ba)	<ul style="list-style-type: none"> 1.3.a) Lack of shared institutional culture 1.3.b) Communication constraints 1.3.c) The institutional vision requires more clarity 1.4.d) Unclear about the institution's status

6.1.1. Definition of tacit knowledge sharing of co-workers

It appeared to be the first important step to find out whether the concept of tacit knowledge is based on a shared understanding across all ontological levels. Questions such as 'What is knowledge all about?', 'Is there a clear concept of knowledge?', 'Do different people agree on a common definition or is the way knowledge is interpreted dependant on a variety of diverse factors as

mentioned in the literature review?', helped to identify whether there was a shared understanding of tacit knowledge. Indeed, the interviewees seemed to hold a diversity of 'tacit knowledge sharing' definitions which will be outlined below.

6.1.1.a) Tacit knowledge is constructed

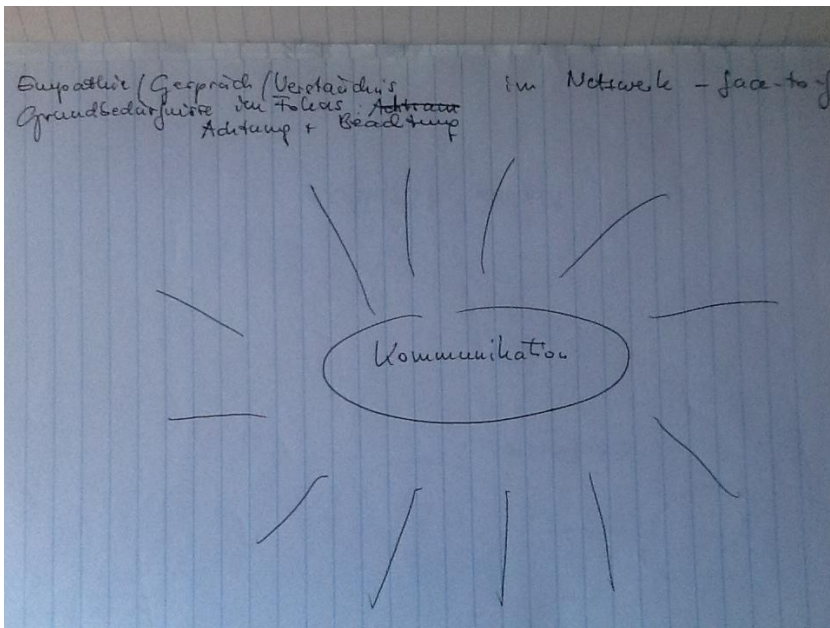
The notion that knowledge is continuously constructed was shared by the majority of the interviewees. In order to construct new knowledge people may want to view themselves as continuous learners who are willing to look beyond their own discipline. The following quotes underpin this concept:

'At university we are very narrow-minded within our knowledge in some way - at least in Italy - at the inside - very often - a frame has been created, also a little bit, to separate the different skills and, I must also say, that very often the one who would like to go beyond such boundaries, is looked upon with suspicion. Only when a person reaches a certain level of independence and the highest level of her/his career, that it is more likely that her/his background would go beyond the field's boundaries. There is the need to be less jealous of one's own knowledge which - in some way is encoded - and we have to be much more open towards others who may know more than we do because they have the background.' (Dean)¹

'This knowledge cannot be codified, because everyone lives in her/his own context. I am an ambassador of the fact that anyone can learn anything if I have the right motivation. In my opinion the concept of constructivism works so well because the teacher is a learner her-/himself; this means s/he does not only frontal teaching. S/he offers the basis, then there comes the creative process; all grows, then the communication is in the network and the teacher is part of the learning group, where s/he covers the role of a coach in that moment. It's about communication and about acknowledgement and attention.' (Professional manager) (See Figure 9 below)²

1 See appendix I

2 See appendix I



Definition of knowledge (Figure 9)

‘Knowledge transfer is a phenomenon where we are educating the students that they should have the capacity to learn; that they do not necessarily do the content, but that we offer to continue learning after and during university in order to develop something new. You have to internalize the problem and that is part of the knowledge transfer thing: the designers can not make other people internalize their ideas; so we give them the power to do it themselves. It starts with experience and it cannot be shared. Not everybody can ride the bike, but I can provide all the means to do it. I think it is about creating the environment and make sure people use this and you should be allowed to do this.’ (Dean)

This leads to the second theme: Tacit knowledge sharing is unlimited.

6.1.1.b) Tacit knowledge is unlimited

Since there is no limit with regards to constructing new knowledge it requires the person to see beyond her/his own discipline; beyond the given reality; beyond the cognitive aspect of knowledge by leaving space for the surprising insight to happen. It requires the knowledge worker to look at the whole elephant from different angles. The following quote underpins the above:

‘One needs to think beyond this sheet; beyond today; one ought to try to guess how the future is; do not stop on what you see written here; to make a small additional step; do not think about your small little world only. Sometimes I clash with other offices because they are locked up in their

microcosmos. Planning and designing means to not forget about any component of our activity.’
(Professional manager)³

Going beyond boundaries and looking at something from different perspectives requires a very personal engagement with the topic one is dwelling in. This leads to the third theme of what tacit knowledge is: Tacit knowledge is personal.

6.1.1.c) Tacit knowledge is personal

The person’s personal skills, history and culture shape her/his knowledge construction. Indeed, this very personal aspect of knowledge - if shared - can move an organization forward. The following statement underlines this aspect:

‘Everything that everyone carries around in that role obviously enriches the institution or the work that is going to be done. I think that every person has a part that is your role, a part that is you in the world and there is also a personal part. And it is precisely this area of intersection that must be explored. And I think for the organization it is useful to explore this area and for people it is very useful to be aware of this distinction. Let's say the balance of the people. Tacit knowledge acquisition is a very personal aspect with an impact on the organization. It does not stop at the personal level; I think it has global effects within the organization. I would not say that the organization needs to change: it is the person who needs to change in a certain way; if I do not start somewhere nothing would ever happen.’ (Professional manager)⁴

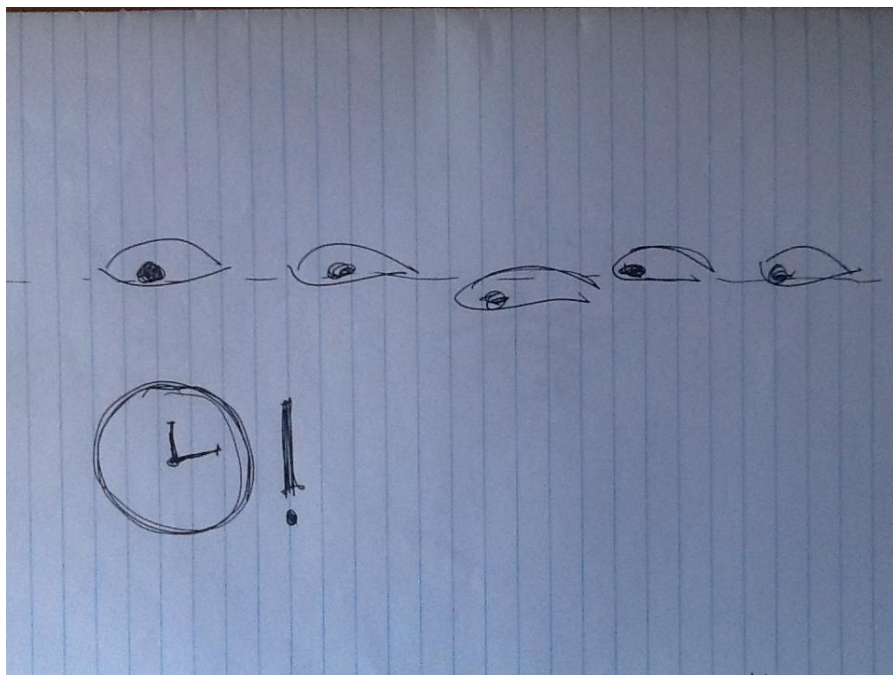
One interviewee phrased the importance of the personal aspect in the tacit knowledge construction as follows:

‘The person may not be replaced. Creatives have their own handwriting in the topic of design and therefore we are very much shaped by this. As designers it is very important to give something your personal touch. As a designer, I am sure, one needs to engage a lot by conveying one’s knowledge, because you are like a seismograph who walks through the world and who perceives the congruences and the discrepancies. Our own view is introduced. Knowledge is always based on experience, on tests, on experiments and on results and it will be further enriched through the exchange of experiences among peers or like-minded and not like-minded people. Because my

3 See appendix I

4 See appendix I

knowledge is certainly a sum of many notions, of many experiences; but it is based on an attitude on how I deal with it. You need to be at eye level with others.’ (See Figure 10 below) (Vice-Dean)⁵



Definition of knowledge (Figure 10)

The two quotes above highlight the fact that the tacit is the very personal aspect of knowledge. It is the so called hidden, implicit, subconscious knowledge which, if cultivated and nourished, can have an impact on the organization. This will be discussed further below.

In order for personal, tacit knowledge to flow, the fourth identified theme is that tacit knowledge sharing is culture.

6.1.1.d) Tacit knowledge is culturally embedded

The interviewees seemed to agree that tacit knowledge sharing needs to be part of the institutional culture if the institution aims to be competitive. One interviewee expressed it in the following way:

‘Tacit knowledge transfer is culture. It must come from the top by defining what the objectives are and how will they be communicated; there is the need for con-sense building and for further awareness.’ (Professional manager)

5 See appendix I

Open communication channels between all ontological levels seem, according to the interviewee, to help increase the awareness of the importance of the individual co-worker's tacit knowledge potential as well as to be the foundation for agreed projects to be created. This will be discussed below.

This leads to the last theme of how tacit knowledge was defined: tacit knowledge is fluid.

6.1.1.e) Tacit knowledge is fluid

The tacit lies in the knowing what, in the knowing how, as well as in the knowing why. Through reflection, space for creativity to emerge, open dialogue and the freedom of expression, personal knowledge can flow in the individual's mind as well as from one person to the other. Both the individual and the collaborative indwelling may then create something new.

One Dean expressed it as follows:

'I think that knowledge is different from discipline to discipline. In the German-speaking countries, a distinction is made between knowing what (Wissen) and knowing how (Koennen). The boundaries are also fluid. I think there are social skills and personality competencies. But, first and foremost, there must be freedom and an open, transparent dialogue, where everything will be disclosed - the disclosure of products, what I am and what I do - I cannot disclose myself from what I am and what I do. The open dialogue gets reinforced through freedom of expression of what I can and what I am. Mine is a knowledge with a strong emphasis on skills. Through my skills enthusiasm will be built up. It is about the transfer of passion and meaning. It is necessary that you train yourself to understand how you can continue to transfer the knowledge to somebody else. There is a strong interpersonal/social component.' (Dean)⁶

By reading the different definitions and interpretations about tacit knowledge and tacit knowledge sharing it seems that there is evidence that each person projects her/his meanings 'into the world and then we perceive them as existing in the world, as having a reality of their own' (Wenger 1998: 58). Such a reality is an individually perceived reality and, accordingly, knowledge is shaped by the way a specific individual gives meaning to the situation s/he is reflecting on or living in.

6 See appendix I

One interviewee, however, was of the opinion that knowledge is never tacit as it always derives from official, coded, documented knowledge. Indeed, she said that ‘Knowledge transfer is never tacit, it is always official; it comes from the top; we know and you do. There are two types of knowledge: administrative and here the relationship with the political world is very important and the faculty have no knowledge about that because we come from everywhere in the world. We have specific knowledge about what students want and what types of courses we are teaching and how the faculty is working.’ (Dean)

According to this interviewee, knowledge comes from the top down and co-workers need to apply what the top management expects their co-workers to do. The distinctiveness between administrative and academic knowledge should be appreciated and all co-workers should, therefore, acknowledge the respective knowledge.

While there is - in the above unique case - the understanding that knowledge is always explicit (knowledge is never tacit) and it is shaped by the instructions which come from top down, the majority see tacit knowledge from both the perspectives of the the individual and the collective dimension. However, it was evident that there was not a commonly shared agreed language of what tacit knowledge is all about and without such an understanding it would not be easy to find an answer to the research question: ‘How does tacit knowledge transfer create competitive niches at higher education?’.

Since language shapes the meaning (Lagemaat 2002), collective reflection, collective interpretation and collective action (Glisby/Holden 2011) have an impact on the creation of meaning. I designed a focus group discussion with a special emphasis on con-sense building of what tacit knowledge may be and how the respective co-workers see their own tacit knowledge being transferred in order to create new niches at higher education level. This reflection has helped participants find agreement on what they commonly viewed tacit knowledge to be (Bryman 2012). It revealed the respective opinions, interpretations, beliefs and values which - through reflective interaction - led to the following common understanding:

‘It is obvious that it is primarily about the level of understanding: those who are on one side must understand the roles and responsibilities of those who are on the other side and vice versa. In fact, we are a company that produces knowledge, that produces intellectual capital; institutional knowledge and as such each co-worker should bring along a third-space mentality with the

understanding of the tacit/individual/implicit/intuitive/personal knowledge of each player.’ (Focus group extract)⁷

All agreed on the fact that people do know more than they can tell (Polanyi 2009) and that knowledge creation is a never-ending process, since, ‘at the moment you are talking about a thing, you miss the target’ (Capra 1984:31).

Both the individual (Polanyi & Prosch 1976) and the social component (Lave & Wenger 1991; Wenger 1998) of tacit knowledge appeared to be seen as the fundamental basics from all interviewees - and even more through the reflective engagement between both academic and professional managers during the focus group discussion. All participants were in agreement on the enormous value of tacit knowledge sharing at institutional level. This will be further discussed in the next section.

6.1.2. The perceived value of tacit knowledge sharing at the institution

All interviewees - except for one - already had developed a clear understanding about the value (Ambrosini & Bowman 2003/2009/2010, Bowman & Toms 2010) of tacit knowledge sharing at the institutional level - across disciplines and between academia and administration. They identified the creation of a tacit knowledge-sharing enabling environment to be a key element for an institution as - according to them - this would help HEIs remain and/or become competitive knowledge creating players. Indeed, tacit knowledge sharing has been seen to be empowering.

6.1.2.a) Knowledge sharing is empowering

If knowledge is shared it does not only empower each single co-worker, but also the entire institution as - in a collaborative engagement - something new can be created. One participant expressed it in the following way:

‘Each individual adds value. Individual knowledge should have a value. So many things can be learned. In short, knowledge is power: if I transfer all my knowledge to others I also give power to others. This is strongly felt at the university.’⁸

7 See appendix I

8 See appendix I

Although there seems to be the fear of losing power by sharing it with others, all participants acknowledged that tacit knowledge exchange makes a person start to be ready to open up by revealing very hidden aspects of her/himself to others and that this would eventually result in a stronger engagement and participation in the world around them. Stone calls this the ‘tacit integration of experience’ (2013:62).

While during the individual interviews the value of tacit knowledge sharing was limited to the theme of empowerment, the focus group discussion helped reveal a few further themes (outlined below) which helped the respective co-workers recognize the importance of the tacit dimension for an institution to grow accordingly: knowledge sharing raises awareness.

6.1.2.b) Knowledge sharing raises awareness

The awareness that different people bring different knowledge to the organization and that, in a moment of construction of new niches, all counterparts may be able to contribute for the benefit of the individual as well as of the institution allows co-workers to treat one another with the needed respect and with the outlook that - by being open to one another - this may have a positive impact on the organization as knowledge-sharing is perceived to be a tool for extending one's personal knowledge as well as the institutional capital. The following comments underline this aspect:

‘It has been a positive experience and I hope that there is a relapse; otherwise the meeting would not have been in this office and promoted by the Rector. There is certainly an interest to know the results of this research.’⁹

‘I find this a very useful exchange. Raising awareness is always positive. I think that raising awareness is useful to make some suggestions for development.’¹⁰

Another value of tacit knowledge-sharing was seen in the opportunity of consensus-building.

6.1.2.c) Knowledge sharing encourages consensus-building

Through collective participation and engagement (Wenger 1998) and interactional expertise (Stone 2013) co-workers see the opportunity to reach consensus and this will, eventually lead to an improvement at all ontological levels which will, in turn, have a relapse on the institutional culture. The following comments underpin both the power of consensus-building with regards to an organizational and/or cultural change:

9 See appendix I

10 See appendix I

‘The best interaction between academics and professional managers is an excellence experience. I strongly believe in consensus-building.’¹¹

‘I expect an improvement at management level. The meeting was very useful and constructive.’¹²

‘Working on organizational culture is beautiful and important - it is a condition for competitiveness.’¹³

During the focus group discussion in particular a strong understanding regarding the value and use of each individual’s tacit knowledge emerged. There was agreement that tacit knowledge sharing would help the organization take considerable steps forward as this would enhance the development of a shared institutional culture. According to the interviewees this would then lead to the creation of competitive niches through, as I would call it, a ‘learning-by-doing’ participation and engagement process (Wenger 1998; Stone 2013; Leistner 2010). There also seems to be agreement that the main condition to create such a culture starts from each person’s personal attitude which - through cross-ontological dialogue and conversation - would raise the awareness that each player’s tacit knowledge is the key for the creation of new competitive niches. Tacit knowledge transfer helps see beyond one’s own field of expertise by dwelling one’s own knowledge in the other field’s knowledge. Instead of remaining ethnocentric, one moves into the integration mode of ethno-relativism (Bennett 2004) where - without losing one’s own perspective - one’s own knowledge gets enriched by the knowledge coming from different angles. It seems that ‘the only way to prevent your products from being commoditised or your markets from being disrupted is to think further ahead than your competitors’ (<http://www.economist.com/news/business/21621778-business-leaders-would-benefit-studying-great-writers-philosopher-kings?fsrc=scn/tw/te/pe/ed/philosopherkings>).

There is evidence that, due to the collective data gathering process, all participants seemed to value the respective tacit knowledge increasingly and to advocate that measures should be introduced in order to give tacit knowledge transfer more space at an institutional level. This will be further analyzed in the second and third sub-research question. However, before doing that I will - in the next section - outline the institutional culture with regards to tacit knowledge transfer as it has been perceived by the participants during the period of data gathering.

11 See appendix I

12 See appendix I

13 See appendix I

6.1.3. The institutional culture with regards to tacit knowledge-sharing practices (ba)

6.1.3.a) Lack of shared institutional culture

By studying the institutional culture in more detail it seems that there is no commonly shared institutional culture throughout the institution. The first established faculty was based on a Planning School concept but there is evidence for other different schools such as the Positioning School, the Design School, The Cultural and Entrepreneurial School as well as the Learning School (see context). The administrative pillar, on the other hand, seems to be organized more around the Planning School as the ‘strategies result from a controlled, conscious process of formal planning, decomposed into distinct steps’ (Mintzberg et al 2005:58). This is designed around the Three-Year-Plan 2014-16¹⁴ approved by the University Council. The final responsibility for the achievement of the objectives lies with the General Director from an administrative point of view and with the Rector from an educational/research point of view, while the ultimate responsibility lies with the President (see statute¹⁵) and as such the ‘responsibility for that overall process rests with the chief executive in principle; responsibility for its execution rests with staff planners in practice’ (Mintzberg et al 2005:58).

It seems, therefore, that the different approaches undermine the creation of one shared culture which - according to the observation and my interpretation of the participants’ desire - should be more based on both a learning school concept where people, ‘acting individually but more often collectively, come to learn about a situation as well as their organization’s capability of dealing with it’ (Mintzberg et al 2005:176). For example, a professional manager states:

‘Indeed, when people from different areas come together to solve a problem it works quite well.’¹⁶

And, on the other hand, on a cultural school concept where people understand the importance of shared interaction and there is a sense of belonging which invites co-workers of all ontological levels to share their tacit/hidden/personal knowledge in order to initiate processes for knowledge creation. For example, one academic manager says:

‘Currently there is no sense of participation. What I often criticize, is the missing sense of belonging of many colleagues. But you have to learn from others’ experiences.’¹⁷;

14 See appendix III

15 See appendix II

16 See appendix I

17 See appendix I

While a professional manager expressed it as follows:

‘What is missing now is definitely the spirit of sacrifice; to be a team in moments of difficulty. We become perhaps too selfish. Towards academia the administration should not be given the task of putting an obstacle in the way; the role of the administration is to shape the chaos.’¹⁸

As stated above, the empirical study has revealed that both academics and professional managers have a strong understanding about the value of knowledge, its transfer throughout the institution and beyond. They also see it as one of the key driving forces to establish an institutional culture which, in their view, would facilitate the collaboration between all co-workers. However, it has not become part of the institutional fabric yet (Swart 2008). In fact, during the conversation with the different participants from both the administrative and the academic side and during the focus group discussion it was evident that the different parties talk about one another in terms of ‘we and they’, where, instead of sharing knowledge, they rather withhold it at times (Alvesson 2000; Henkel 2000; Swart 2008) - not because they do not want to share it, but rather because there are not enough opportunities to do so or because there are still some stereotypes (see comments below) which prevent them from doing so. While the professional managers seem to be focused on interpreting regulations and laws, academic managers and staff seem to feel limited by such regulations in their academic enterprise.

6.1.3.b) Communication constraints

One of the characteristics of such a culture is based on communication constraints. Indeed, it seems that the institution does not give enough space for sufficient formal and informal dialogue between all parties to take place. The following comments seem to underpin the above:

‘Conversation between the two (central administration and faculty) is deaf people conversation; there is no congruent dialogue between top management and faculty. More conversation is needed; all this emailing instead of going to talk to people doesn’t help.’

‘At administration level, there are sometimes people who place themselves in front of the academia with an attitude of inferiority; on the part of the academia; on the other hand, there are people who behave with an attitude of superiority with regards to the administration. It takes an approach of ‘cooperative learning’: by giving space to a university that expresses a sense of belonging. And if there is this sense of belonging the tacit knowledge exchange will also be promoted.’¹⁹

18 See appendix I

19 See appendix I

‘I think we are still in a period of transition from an old to a new system. Currently we are suffering from the hustle and bustle in which we find ourselves; precisely because much has to be implemented very quickly and because, being held very close by austerity measures, we even encounter staff constraints. We must invest more in communication. Surely, I could imagine a stronger reference to the President, the Rector and the Director General (‘Praesidium’) in the future in order to debate, meet and talk about certain topics every now and then.’²⁰

‘Everyone defends his territory. I think administration and academia are at eye level. Autonomy is needed; so, that as a dean one does not have the feeling of being exposed to constant monitoring.’²¹

‘The colleagues who work in the faculty (administrative staff) transfer the information to the academia. And it is right here where confusion is created.’²²

‘You have to arrange meetings where you explain everything. There is a flood of information, a flood of internal regulations; indeed, we have very many - too many - hence, you have to filter the most important things.’²³

‘So, you have to have the ability to recognize your own limits and what your own skills are.’²⁴

When interpreting the above comments it seems evident that the institutional culture lacks congruent dialogue among disciplines and across academia and administration. Many co-workers still work in their own fields of competencies, instead of seeing beyond one’s own area of expertise. Also, although some improvements - with regards to bringing the administration closer to academia - have taken place, it seems that important information gets lost at interface level between central and faculty administration which - at times - creates some confusion. Hence, there is a strong desire from both sides to recognize one another’s competencies and roles by giving more emphasis to a cross-departmental and cross-institutional dialogue in the interest of the institution and its competitive advantage.

To summarize the above it can be said that currently the separation between academics and professional managers does not seem to facilitate the creation of a strong institutional culture (Valimaa 1998; Menguc et al 2011). As mentioned above, at times there is still a culture of distrust

20 See appendix I

21 See appendix I

22 See appendix I

23 See appendix I

24 See appendix I

which is not helpful for tacit knowledge-sharing processes. The more control-driven approach of the administrative side, as it is perceived both by some academics and professional managers, has an impact on the work attitude in the long run. This seems to result in a perceived frustration about the loss of academic freedom and creativity.

6.1.3.c) The institutional vision requires more clarity

The President's and the Rector's vision to disseminate a culture based on inter-disciplinary knowledge transfer (Swart 2011) in order to position the University in unique, creative, application-oriented and trans-disciplinary niches in a trilingual and international context seems to be filtering through gradually.

However, with regards to the institution's vision of being in a trilingual and intercultural context needs to be given more clarity. The interviewees' expressed their reservations about the institution's branding statement as follows:

'As long as we as a university so greatly benefit from the tradition of foreign students, whether from neighboring provinces, whether from more distant provinces, whether from abroad, we benefit (actually we should pay them to come here because they give us the international environment). They give students from the region - who do not go to the outside - the opportunity to exchange ideas with others. This 'capital stock', which we attract to the university, is very important for us.'²⁵

'I think the trilingualism is actually a bit of a counterpoint to internationalism, because, by targeting three languages, we discourage very many people who do not have the three languages to come to us.'²⁶

In contrast, for another interviewee the trilingualism is a strategic objective and as such it does not make sense to have a debate about the pros and cons as it has to be seen as a competitive niche on its own. The following comment underpins this opinion:

'This is a challenge and we are the only ones to have it and it should not be questioned. If anything, I have to discuss what the means are to overcome these things.'²⁷

25 See appendix I

26 See appendix I

27 See appendix I

There is evidence that the institutional identity to be, think and act in trilingual and intercultural terms has reached people's minds by being ready to discuss the terminology; however, they have not reached their hearts yet.

This results in the lack of a bold institutional vision (Kezar & Eckel 2002). Indeed, many interviewees mentioned that the institutional objectives have not been discussed at length and that there is not yet a clear understanding about how to bring the respective departments' and offices' objectives in alignment with the core objectives outlined in the three years plan of the institution.²⁸ There is a strong desire by the interviewees to prioritize and clarify shared objectives in order to work on a tacit knowledge-sharing culture which will put the emphasis on the exchange of individual expertise in order to enhance the creation of competitive niches. One interviewee made the following comment:

'Sometimes the 'know how' is missing because we do not talk to one another.'²⁹ (see 1.3.b)

6.1.3.d) Uncertainty about the institution's status

Furthermore, there is not sufficient clarity among all managers with regard to the institution's position on what a free university is supposed to be and which possibilities could set it free from possible political interferences due to its dependency on public funding (Clarke et al 2012; Henkel 2000; Menguc et al 2011). This will be further analyzed in the next section.

To summarize, we can say that at the present moment tacit knowledge-sharing processes and practices seem to happen, first and foremost, instinctively among those people who are interested in doing so. One factor which inhibits a smooth knowledge flow seems to lie in the lack of clarity and the lack of time. Competencies and core objectives are not clearly communicated and this seems to create confusion. Many knowledge-workers perceive themselves as co-workers who have to follow standardized guidelines with little opportunity to take on individual responsibility (Clarke et al 2012; Henkel 2000; Yeuk-Mui et al 2002). According to the outcome of the empirical study a number of highly qualified co-workers feel somewhat frustrated about these limitations and feel that their expertise is not as valued as they would hope. They long for more freedom, for more time to meet with one another, for more risk-taking opportunities and for more autonomy and trust (Dhanaraj et al 2004).

28 See appendix III

29 See appendix I

It seems that there is a strong desire by all top managers (academics and professional managers) to institutionalize knowledge-sharing processes and routines. Due to the new statute and the organizational change which has been introduced (see context) there are signs for increased knowledge-sharing opportunities at institutional level. The importance to institutionalize knowledge-sharing routines has been mentioned by all interviewees and this was also agreed to be of importance during the focus group discussion. There is shared understanding by all interviewees that tacit knowledge-sharing as a behavioural pattern will eventually inspire knowledge-workers since it gives them meaning and motivation (Gioia & Thomas 1996; Swart 2008). With the new statute all parties are seeing small tentative signs of the institution going in this direction.

In the next section I will describe in more detail the barriers and enablers of tacit knowledge sharing outlined by the interviewees during the period of data gathering.

6.2 What are the barriers and enablers of tacit knowledge sharing?

The following themes have been identified with regards to the second sub-research question:

Barriers and Enablers (Table 4)

Themes	
Barriers	<ul style="list-style-type: none"> a) 'they-we perception' b) unclear commonly shared vision and objectives c) A lack of commonly shared institutional culture (ba) d) physical separation between central administration and faculty administration/academia e) rigid bureaucratic pillar f) time constraints g) internal competition h) communication constraints
Enablers	<ul style="list-style-type: none"> a) acknowledgement of the value of tacit dimension b) clear vision with commonly shared objectives c) shared institutional culture d) organizational structure based on cross-role, cross-departmental and trans-disciplinary collaboration di) creation of interdisciplinary Communities of Practice e) creation of time - 'slow uni' approach f) decentralization and decrease of bureaucracy g) size

I will start the analysis with the perceived barriers by the interviewees in the institutional environment of the Free University of Bozen-Bolzano.

6.2.1. Barriers

6.2.1.a) The 'they-we' perception

One of the main barriers for tacit knowledge-sharing seems to be the segmented perception of both the academic and professional managers. Indeed, all the interviewees mentioned a distinctive understanding of their identity and roles as a strong obstacle with regards to the creation of new competitive niches. It seems that the demanding situation HEIs find themselves in, and in order to act constructively in a continuously changing environment, poses 'a threat to self-image .., In order to accommodate, people must make changes in themselves' (von Krogh et al 2000:20). Furthermore, according to the literature reviewed on identity it seems that the identity of academics is seen to be primarily tied to their academic discipline (Henkel 2005, Bacon 2009) while the identity of professional managers is more tied to the institution as a whole (Shattock 2003, Bacon 2009).

The following comments underpin this view of separation (for confidentiality and privacy reasons I will not indicate the role of the respective interviewees):

'There is the administrative and the academic side. The administration: they know regulations, they know the decisions we have made in the past, they know what exceptions have been made; they have knowledge about the history of the faculty that faculty don't have or that we don't care to remember - we have so much to remember. We let them do this. They organize the place; they make the place work, they do all of these things. However, there is a strong lack of trust. In their view the Professors are the 'furbi' (sly: note of the author). We are seen by the administration as a whole - we see then as black box. We never know what will come out of this and it is usually not in our favour. I think the biggest barrier between these is the lack of trust.'

'For an academic, it is difficult to understand the decisions of the administration. For us professional managers it is difficult to explain creative minds the need for certain decisions because we are seen as the so-called idiot savants.'³⁰

'For years we have lived in two different worlds. We have operated like this for years. Partially, this was consciously and unconsciously promoted by the former management. It was partially also sustained by a few in the academia. That is why such fronts have been formed. This is difficult to

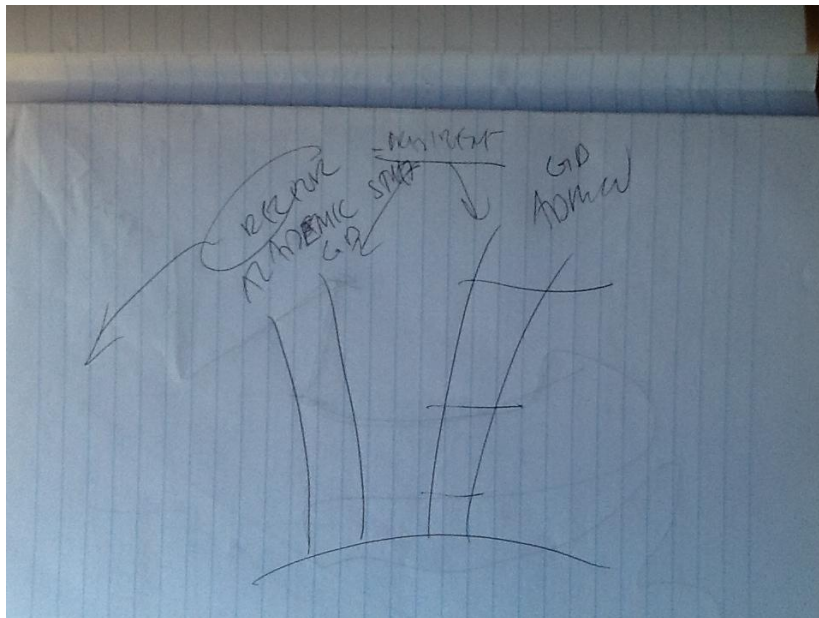
30 See appendix I

overcome in time. We are partially at the level, where something - just because it comes from academia - a priori is already better than what comes from the administration.'³¹

'Certain decisions are taken in the three-member formed presidency and basically, their decisions have to satisfy those who fund the institution. Then we have a mid-range directive and then at the last level the operating level. Here, at the operational level the penetration seems to be very difficult because everyone is busy with their jobs. Thus, the administration - the process is their world, and when the academic goes into the classroom, lecturing and research is their world. I'm talking about operational level. It is right here - in this last level - where processes take place. It is here where frictions arise.'³²

'I see the administrative units would be more brought to the same boat as we are now; there are two boats and they are rowing in two diverse directions. We have two channels: the Rector and the Director General. At the end of the day whether something can be done will be decided by the Director General; the real power is the administrative side while the ultimate freedom is the content of the work.'

This interviewee put this distinction of the two sides as follows down on paper:



Separation between academia and administration (Figure 11)

As one can see the two segmented channels do not meet at all and this increases the perception of holding two distinctive roles and identities in the institution.

31 See appendix I

32 See appendix I

However, according to Whitchurch (2008) and Henkel (2005), in HEIs the identity of both academics and their professional colleagues is continuously changing. The requirements of professionals lie in leading and managing the institution into a successful future by responding to the challenges HEIs are facing. In fact, the literature recognizes the fact that the complexity of HEIs has put a high pressure on all professionals working at that level. The continuous exposure to change and the need to live up to the expectations of all stakeholders are the reason for their ‘crises of professional self-identity’ (Nixon 1996: 5) and that is the reason why both academics and professional managers at HEIs have to view their identity as an ongoing process. It seems that, if all parties that are engaged in the success of the institution, envisaged change as an opportunity to grow and to learn with and from one another then both parties would embrace the notion that academics could not make the institution work without their administrative counterparts and vice versa as ‘academics make universities great, but without administrators there would not be the infrastructure, the support, to make it happen’ (Baldwin 2009: 94).

The following comments express the view that opening up and sharing tacit knowledge for one another’s benefit would reduce this ‘they-we’ perception and help the institution focus on cross-side collaboration:

‘The administration has a language and academia has a language. The language of academia has to be understood.’³³

‘Sometimes, I do not say always, but often it happens that there is a closure on the other side: the academic side. So, there must be the willingness to understand when it says: these things are feasible to be done; also to accept this situation. So, there must be the open-mindedness: the willingness to listen to one another.’³⁴

It seems that, due to these major changes, identity can not be seen as a steady figure (Henkel 2000). In such moments academics and administrators might better perceive their identity as something that is continuously challenging them to open up towards the requirements that are dictated by the new demands of today’s knowledge society and where those institutions and individuals who are ready to respond accordingly tend to achieve the most (McInnis 1998). Academics are challenged to understand that the department and their discipline can not anymore be the only focus, but instead

33 See appendix I

34 See appendix I

they might need to work across the boundaries of the institution. A continuous interaction between the disciplines, the institution and the individuals is seen to be one of the key elements for success (Henkel 2005). The same applies to professional managers who are joining the university from outside (Bacon 2009). While, when joining an HEI, they might still identify themselves mainly with their specialism (Bacon 2009), the longer they work at university level they seem to identify themselves more with the institution, with the core values, the mission and the essence of the institution's corporate identity. Professional managers become 'part of the conversation between the academic community and the institution' (Bacon 2009: 14) and a key element of the professional manager's identity lies in 'the ability to empathize with the intrinsic academic values' (Archer 2000, in Whitchurch 2004: 19). Academics at the other hand might need to acknowledge the importance of their professional counterparts for the successful functioning of the institution as, according to McInnis (1998), the main source of conflict between the two derives from the lack of acknowledgement administrators seem to receive from their academic colleagues.

The above-mentioned perception of separation between the two and the 'power concentration' at the administrative side makes knowledge-workers perceive themselves as co-workers who have little influence on the institution's direction and who are not clearly aware what this direction seems to be.

6.2.1.b) Unclear commonly shared vision and objectives

Indeed, another factor which seems to inhibit a smooth knowledge flow across the institution is the lack of clarity on the institution's vision, its objectives and the respective co-workers' roles and competencies. This makes co-workers feel powerless, with little or no opportunity to take on individual responsibility (Clarke et al 2012; Henkel 2000; Yeuk-Mui et al 2002).

The interviewees externalized their reservations as follows (please note that the roles of the respective interviewees have not been indicated due to confidentiality and privacy reasons):

'I have no idea where the decisions are coming from. They are just top to bottom.'

'When we plan actions for next year the university management never tells us what is happening because they want to lower the budget. They try to give us as little information as possible. The information is not shared at all, it is always shared after the fact. We should see how the university plans its future and we should be part of this process. The involvement is very controlled. People

who are taking risks at university are put aside. I don't know what the goals are. We never talk about the goals of individuals. There are always the official goals of the university such and such. But I don't see this in the hearts and the minds of the people.'

'Yesterday the statute was presented. There was criticism: Why were we professors not included in the process and then it was said that there were 37 meetings. Out of the 37 meetings I know of none to which I was invited.'³⁵

'I think the two-thirds who work here - I think that if the color of the manholes of Walther Square had changed, it would be the same - do not have the perception of this problem - at least in my experience. Often it is not clear where the guidelines are coming from. This is the problem.'³⁶

'It is not exactly clear what the real goal is. We experience such things on and on that new study courses are set up; but one does not understand in what context because, for example, we might not be equipped with the right faculty for it.'³⁷

It seems that this lack of clarity about competencies, vision and objectives creates a lot of confusion and additional stress as the pace for the implementation of new guidelines and new courses - in order to respond quickly to the societal demands - is very high (Shattock 2003; Swart 2011) - and, hence, tacit knowledge flow should be facilitated while the top-down implementation of vision and objectives with little opportunities for all co-workers to be involved in - reduces sight for meaningful action (Palmer et al 2010): something all knowledge-workers seem to long for. This has also given space to the establishment of different cultures and strategic approaches in the five departments as well as in their respective administration which will be the next inhibiting factor for tacit knowledge to flow across the institution.

35 See appendix I

36 See appendix I

37 See appendix I

6.2.1.c) A lack commonly shared institutional culture (ba)

As mentioned above it seems that there is no commonly shared institutional culture throughout the institution. There is evidence for different schools in the respective faculties such as the Planning School, the Positioning School, the Design School, The Cultural and Entrepreneurial School as well as the Learning School (see context). The administration, on the other hand, seems to be organized more around the Planning School where the ultimate responsibility lies with the chief executive (Mintzberg et al 2005).

The following distinctive observations have been made by two of the interviewees (for confidentiality and privacy reasons their role is not indicated) - evidence that their strategic approach is led by a very distinctive reasoning with regards to tacit knowledge flow:

‘Administrators should see the world with less rules; they never go outside and it is those people (administrators) which control about travel and they never travel and they define how business travel should be done. So, you have people who don’t have any tacit knowledge about the travel and these are the people who make the rules about travelling; they punish you for saving money. You are immediately punished if you save money because you are not given the money the next year. So, we can burn money instead of using it strategically for something where we really need it. This creates more distrust in the environment because you see that you cannot trust people for making sensible decisions.’

‘When I was dean, I have always said to the people, people spend this money. Let's show them that we need this money, then we will continue to get it. If we suddenly - two out of 10 - don’t travel anymore, then the administration may ask, why should we give them this money?’³⁸

These two distinctive statements underpin the notion of the different strategic approaches in two distinctive faculties. While in the former comment there is the idea to think in entrepreneurial terms in order to use the money where it is most needed by using it the following year, in the latter example there is the understanding to take advantage of the assigned budget according to the strategic plan of the institution. Although both actions may have their valid space the institutional cultural experience is very different: the former perceives it as lack of flexibility and the latter as an opportunity to spend in order to gain more knowledge by traveling if allocated ahead of time.

38 See appendix I

The existence of such diverse strategic approaches seem to undermine the creation of one shared culture and this leads quite a few highly qualified co-workers to feel frustrated about their limitations and about their perception that their personal tacit knowledge is not valued enough. They long for more freedom, for more risk-taking opportunities and for more autonomy and trust (Dhanaraj et al 2004) when they say, for example:

‘There is a lack of trust.’

or

‘There is zero trust: because of a few who have misused the system in the past. The university environment is the most difficult environment. That is why people should change every five years and now we have so many people who don’t have the possibility to go anywhere: not only the administration, but also the academics. When I started here, I said I will make it the best place in Italy. And six months later I realized that it is outrageous that I should not be doing. For example I wanted to introduce a fridge to store water bottles. Then there was the fear that people would steal the water. So, we could not do it. This leads to further mistrust.’

Since trust is one of the key factors which play a role in the tacit knowledge flow arena it may be given a lot of emphasis to work on strategies on a personal and collective level in order to build trust across the institution (Leistner 2010). Trust leads to reciprocal respect and these seem to be the basics for the establishment of a strong institutional culture.

Another factor which does not help create a shared strategic culture is the physical separation between central administration and faculty administration/academia.

6.2.1.d) The physical separation between the central administration and the faculty administration/academia

Many interviewees expressed their dissatisfaction about the physical separation of both the central administration and the faculties and their operational administration staff. As stated above this separation does not help tacit knowledge flow and there is more frustration about being bombarded with regulations via email without having sufficient interaction with the respective areas of expertise. The following comments seem to confirm a commonly perceived frustration (the roles of the respective interviewees have not been indicated for confidentiality and privacy reasons):

‘The central administration is in the central building. The higher management is hiding in their big building. They have even their secret passage ways - they don’t have to go out in the corridors to see each other. So, they have their own club; and it is not inviting. So, going in there means that you are in trouble or something else. This is the feeling one has and then you are made to wait outside and the possibility to finally meet. I am a big believer in an informal atmosphere and, I think, that lowering the barriers would help us and trying to go after the same goal is better.’

‘I avoid having anything to do with the central administration.’³⁹

‘The atmosphere in the other building is different from the one in the main building. There it is much more closed and I have the impression that one can not exactly see what's going on here, what dynamics arise here, what problems are here. They find themselves in a sealed context and this problem of space is certainly not so easy to overcome. There is a lack of reference to the practical aspect.’⁴⁰

‘Before even within the administration, there were some fronts, internal blocks: the colleagues of the faculty felt somehow separate from us and vice versa. Slowly we realized that we have to work in groups.’⁴¹

There is the desire to break this physical separation down in order to understand the respective needs since such physical boundaries, instead of practicing dialogue, make the central administration isolated from their faculty counterparts. As mentioned above, right in this interface a lot of knowledge gets lost and, as the latter interviewee stated, the desire to step out from one’s own boundaries and to work in groups would help administrative and academic managers view one another as two entities that, by making their tacit knowledge flow, may be able to create new competitive niches. (Swart 2011; McInnis 1998).

This leads to the next barrier in the tacit knowledge flow arena: the rigid bureaucratic pillar.

6.2.1.e) The rigid bureaucratic pillar

According to Vostal, one of the barriers with regards to competition-excellence is the increasing burdens which ‘result in the commonly reported experience of distraction and temporal interruption’ (2014:12). Indeed, the interviewees feel that they are constantly distracted, in their

39 See appendix I

40 See appendix I

41 See appendix I

view, by unsatisfactory tasks which inhibit them from using their time to their best. They phrased it as follows (the roles have not been indicated for confidentiality and privacy reasons):

‘The difficulty lies in the interpretation. It is a regulation-problem; what is normal to me is not necessarily normal here. I still have problems with people who can’t think by themselves other than referring to regulations - what you are allowed to do and not to do. The big confusion is created about the content as there are different interpretations.’

‘The university was established out of an administrative effort. Everything is outsourced and this mentality still prevails. The mentality is still that there is not tacit knowledge to be transferred between the parties. It is a regulative environment and I feel that there are a lot of constraints that prohibit even thinking about tacit knowledge transfer of any sort. We receive lots of explicit knowledge about new rules; we receive very official details about what the new rules are. There is a focus on explicit knowledge. It is really about the regulations and the laws that we discuss and that is the only type of discussion that takes place. It is about whether you can do it or not; this is what the principal question is. The system is over-interpreted. So, when we want to improve something this is how it operates. We don’t take a holistic approach; we don’t understand where the value comes from and the value is the most important thing for the entire process. But there is nobody responsible for the entire process. There is always somebody saying no to individual steps. Saying no is the safest way. Even if there is no rule they would invent the rule, just to be on the safe side.’

‘Many regulations have been introduced which need to be dismantled.’⁴²

‘I did an analysis of my last five months and I put the following on the plate: 80% of my commitments are of institutional nature; 20% of research and teaching. Then at the end I find myself at home in the evening and I see myself writing an article, presentations, because I can not find the time during the day. The administrative aspect is pervasive. The administration releases edicts which say that the academics are required to establish calls for new courses and must give the translation in three languages. If you do not know a language, please contact a fellow native speaker. The analysis that I do is that we need to get rid of the stiffness to go forward and that it takes a bit of flexibility on the part of all. So, the problem is that of flexibility.’⁴³

42 See appendix I

43 See appendix I

‘The legislation, in Italy, is always very vague and nebulous and it is important to have this exchange in order to be able to understand how things need to be seen.’⁴⁴

According to the above, there is a strong perception that the institution puts explicit knowledge before tacit knowledge and that the invasion of regulations puts knowledge-worker under a lot of pressure. The last interviewee puts the focus on the importance of tacit knowledge to flow in order to reach a commonly shared understanding about the regulations and also to focus on the co-responsibility for their interpretation. In order to do so, dialogue is required and accordingly this takes time (Stone 2013; von Krogh et al 2000; Wenger 1998; Vostal 2014). Hence, time constraints are seen as another barrier in the tacit knowledge-sharing process.

6.2.1.f) Time Constraints

According to Leistner ‘the strongest barrier for being involved in knowledge-sharing activities is not lack of funding but lack of time’ (2010:39). Knowledge-workers at higher education level ‘can experience time pressure, haste, hurry and rush - all of these essentially cultural-phenomenological rather than physical description - without even stirring from our office desk’ (Tomlinson 2007, in Vostal 2014:8). All interviewees mentioned time constraints as a burden and as one of the key factors of not being able to gather together for tacit knowledge-sharing purposes. One participant expressed it as follows:

‘There is no time for reflection. There are not any reflection moments that are not geared to have immediate results right away. Change management is needed, in my opinion, which should accompany from a factual situation to a new situation by knowing where to go. But that does not invest only in the daily operational aspects; but rather in a cultural change.’⁴⁵

‘We are all entrepreneurs because we are moving in our own scientific fields and we are strong individuals. Thus, these individuals are constantly on the run and they have little time to meet with others. We all suffer from the fast pace. The problem is the time. Much is left up to the coincidence, because there are no institutional moments. The time factor is luxury good.’⁴⁶

‘Sometimes I would give more space to meetings where there is more space to express individual opinions. Now the meetings are structured in such a way that first the information is given and then

44 See appendix I

45 See appendix I

46 See appendix I

there is a brief discussion in order to reach a decision. Not always, in my opinion, there is time to explore certain things.’⁴⁷

‘I feel suffocated by work and frustrated for not being able to do proper research.’⁴⁸

‘There is no time for reflection and therefore one can not make strategic decisions. I also think the setting of priorities does not work. There are many initiatives from different sides. Everyone thinks that they must do something, but then it is not clear what is the priority. And one often gets lost in these many activities and this causes a lot of stress.’⁴⁹

The lack of time makes both professional and academic managers feel under pressure and they often also develop a sense of guilt as academics feel that they lack time to pursue their core academic tasks and professional managers realize that - by being under time constraints - they can not make themselves available to academia the way they would like to (Vostal 2014). This is where frustration grows and, instead of overcoming difficulties, the distance between the two seems to increase although there is the awareness that things may only change if time is given to collective reflection, interpretation, action and, last but not least, collective improvisation (Glisby et al 2011).

This leads to the next barrier which inhibits the flow of tacit knowledge: internal competition

6.2.1.g) Internal competition

Since the institution has been born out of the Planning School based on a rigid hierarchical structure, as outlined before, the perception of identifying more with one’s own field or area of expertise leads to a culture of taking advantage for one’s own field’s or department’s sake instead of seeing the institution as one whole picture where there may be the desire for inter-disciplinary collaboration. The following extracts confirm the above:

‘What is missing is taking advantage of a 'win-win-situation' of skills that are in other faculties. Jealousies arise.’⁵⁰

‘We are already segmented and everybody sees his or her own field, her/his own segment. Everyone has their own vision; perhaps it is more challenging from a psychological point of view,

47 See appendix I

48 See appendix I

49 See appendix I

50 See appendix I

for me, for all to try to sit down at a table by integrating, coordinating and trying to achieve a more coordinated, more consistent system with less redundancy and less criticality.’⁵¹

‘There are subcultures: If a group is expanding then it is at the expense of others. Perhaps they look at the world from their narrow perspective instead of building upon teamwork as university and network with other disciplines. As long as this way of looking at things does not change nothing will change.’⁵²

Being concentrated mainly on their own field of expertise the basis for dialogue seems to be missing and the majority of knowledge-workers are more interested to pursue their own interest.

It seems that having little in common, there is little space to develop, as Whitchurch (2008) defines them, third space identities: identities which go beyond their boundaries of expertise. Identities which are interested in growing into a new, blended way of collaboration. Such a segmented way of approaching each knowledge-worker’s work reality undermines the creation of a strong institutional culture (Valimaa 1998; Menguc et al 2011) that would eventually lead to the creation of competitive niches. Such a mentality also has an impact on the conversational aspect across the institution: the last identified barrier for tacit knowledge sharing at the Free University of Bozen-Bolzano: communication constraints.

6.2.1.h) Communication constraints

In order to allow tacit knowledge to reach out to the respective co-workers the conversation needs to be open to all knowledge-workers if an HEI aims to be competitive. Indeed, in Nonaka & Takeuchi’s (1995) view, the success seems to lie in the interconnectedness of various disciplines by sharing knowledge between the different fields: creativity is born out of the tacit and/or through social interaction (Gallo 2010). The interviewees commented on this aspect as follows:

‘Conversation between the two is deaf people conversation; conversation with the higher administration has not happened. I tried many of the tricks; there is no congruent dialogue between top management and faculty. More conversation is needed. I have the impression that when I communicate some of my tacit knowledge it gets used for somebody else’s purposes and there is no direct individual contact from academia to the Director General.’

‘We do not create room for exchange for administrators and academics. We do not talk enough with one another - talking is so important.’

51 See appendix I

52 See appendix I

‘Many problems that we have internally are based on the lack of knowledge of procedures and roles due to the lack of dialogue.’⁵³

The lack of cross-departmental, inter-disciplinary and cross-boundaries dialogue, the ‘they-we’ perception, an unclear shared vision and culture as well as the physical separation between central administration and academia, a rigid bureaucratic pillar, time constraints and a subtly perceived internal competition seem to prevent the institution from being competitive with regards to their knowledge creation. However, first attempts to develop in these terms have been noticed and a variety of tacit knowledge-sharing enablers could be identified. They will be outlined in the next section.

6.2.2. Enablers

The enablers outlined below are an integration of the first signs of development with regards to tacit knowledge-sharing practices at institutional level. However, first and foremost, I aim to discuss the interviewees’ views on what the Free University of Bozen-Bolzano should be doing in order to create a tacit knowledge-enabling environment which, eventually, would help the institution create further competitive niches. The most important enabler seems to be the acknowledgement and appreciation of the value of tacit knowledge by all co-workers.

6.2.2.a) Acknowledgement of the value of the tacit dimension

There is a common understanding that knowledge gets constructed (Bennett 2004) by the person her-/himself as ‘in each new experience, another dimension of the soul unfolds. The person is always a nomad, journeying from threshold to threshold, into ever different experiences’ (O’Donohue 1997:163). On the other hand, in order for the tacit dimension to grow, the social component is of equal importance as ‘the synergy between their own knowledge and that of their peers’ (Bowman/Swart 2007:493) may be viewed as ‘embedded capital’ (Bowman/Swart 2007:493): the core element for an institution’s competitiveness. The awareness of the value of each co-worker’s tacit dimension seems to be the basis for the creation of a tacit knowledge-enabling environment. The following comments may confirm this interpretation (for confidentiality and privacy reasons the interviewees’ roles have not been indicated):

‘There needs to be the acknowledgement that both groups (academics and administrators: note of the author) have something to share; there needs to be the recognition that there is something.’

53 See appendix I

‘There needs to be the awareness about the importance that each individual has more to say than s/he can tell and therefore informal gatherings in cosy places should be at hand.’

‘In my opinion, to be very open and to be willing to listen, even to suggestions; I don’t know, also to the inputs that come from colleagues.’⁵⁴

‘... that there is the respect for the various roles. And respect means that one says that everyone works in her/his domain by respecting the knowledge, the know-how, the competences of this person and, of course, by bringing their view in the conversation.’⁵⁵

‘We must recognize the tacit knowledge of each employee.’⁵⁶

By recognizing the tacit knowledge of each co-worker it seems that qualified professionals get attracted ‘by their intellectual environment, as characterized by colleagues in the institution’ (Reichert 2006:21) which may lead to a cultural attitude based on knowledge sharing which aims to be better than others (Reichert 2006). Such a cultural approach, however, requires another factor to be put in place first: a clear vision with commonly shared objectives.

6.2.2.b) A clear vision with commonly shared objectives

According to von Krogh et al, instilling a knowledge vision is seen as the ‘organizational glue’ (2000:99) which gives the institutional co-workers a clear direction by mapping out the current situation, the vision with correlated objectives they aim to reach through a shared institutional enterprise. This will help them identify the larger picture by understanding which knowledge is needed in order to create something new. Hence, clarity about the common meaning may be based on a commonly shared language (van de Lagemaat 2008) which may then encourage knowledge-workers to create something worthwhile (Palmer et al 2010; Weir 2012). This ‘may require years of labor’ (van de Lagemaat 2008:150). The following comments confirm the interviewees’ desire for such clarity with regards to vision and objectives when they, for example, say:

‘The institution must have a common denominator. Measurable and qualitative and quantitative targets have to be set. This is then ‘an agreement’ for the employees themselves; then they know exactly where it is going for themselves. They do it themselves. The achievement of the target

54 See appendix I

55 See appendix I

56 See appendix I

results in a feeling of happiness. It's like Adrenaline. These objectives will be determined through dialogue. The goals must be understandable for the employees.’⁵⁷

‘Our main funders, the local government, wants the University to focus on particular topics. They expect the FUB to focus on the theme trilingualism and its improvement. And this must be the institution’s goal.’⁵⁸

‘It is very important to have common values and goals, so that the organization moves in a specific direction.’⁵⁹

‘One of the main strategies is the trilingualism and this has to be made the element of strength and clarity needs to be made on all strategic objectives.’⁶⁰

Giving vision helps to instill a spirit of motivation; a clear sense of direction as well as a sense of institutional identity. This is why nearly all interviewees mentioned the trilingualism strategy to be a core competitive niche of the institution which should become part of the institutional culture. We may call this, in alignment with von Krogh et al a ‘sense of emotional knowledge and care in the organization’ (2000:4). According to the interviewees and to the studied literature clarity on vision and institutional direction helps co-workers identify with what the institution stands for and, hence, it is the main principle on which to establish a shared institutional culture.

6.2.2.c) A shared institutional culture

Since all interviewees agree on the high value of tacit knowledge and the concept of seeing the individual and the social dimension of knowledge building to be one of the key factors of competitiveness, it seems that the institutional culture, which strategically emphasizes the value of learning, is the basis for competitive advantage: ‘A culture that values entrepreneurship and innovation provides the environment in which learning from exploration and experimentation is most likely to take place.’ (Slater & Narver 1995:1). Such a culture recognizes the notion that knowledge is always personal/tacit as it is embodied in people (Verna 2012) and, by the way people work and learn individually and collectively, new knowledge may grow. With regards to the institutional culture the following statements have been made:

‘We all have the urge to learn. I talk to the Germans in German, to Italians in Italian and I run the department in English. However, it involves a transfer of knowledge; in this case, the language that

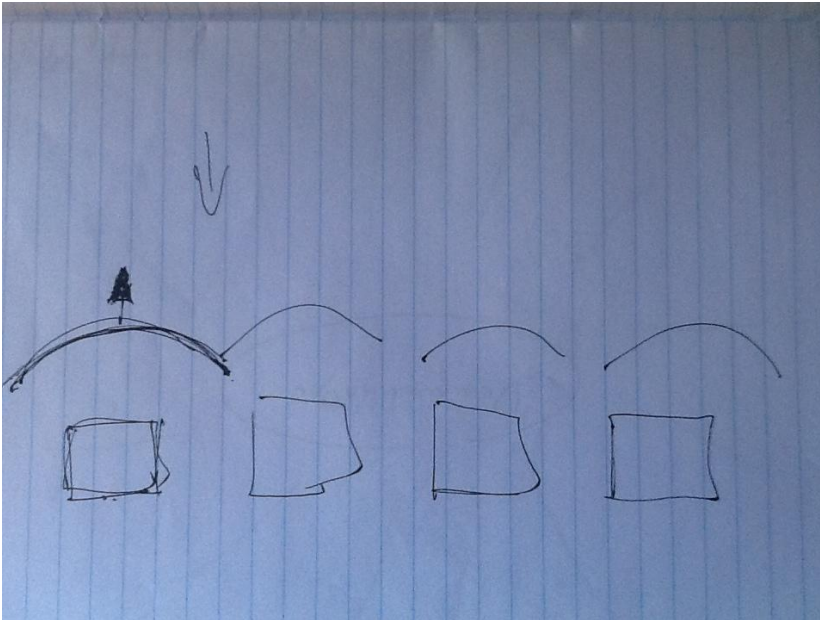
57 See appendix I

58 See appendix I

59 See appendix I

60 See appendix I

leads to the creation of new things. I would start from the bottom through the project learning at group level. They must be under a certain umbrella and the umbrella has to be large; there must enter new life from those who have different backgrounds - you have to define the issue - but an absolutely flexible umbrella of major interest to society.⁶¹ (see Figure 12 below)



Drawing on institutional culture (Figure 12)

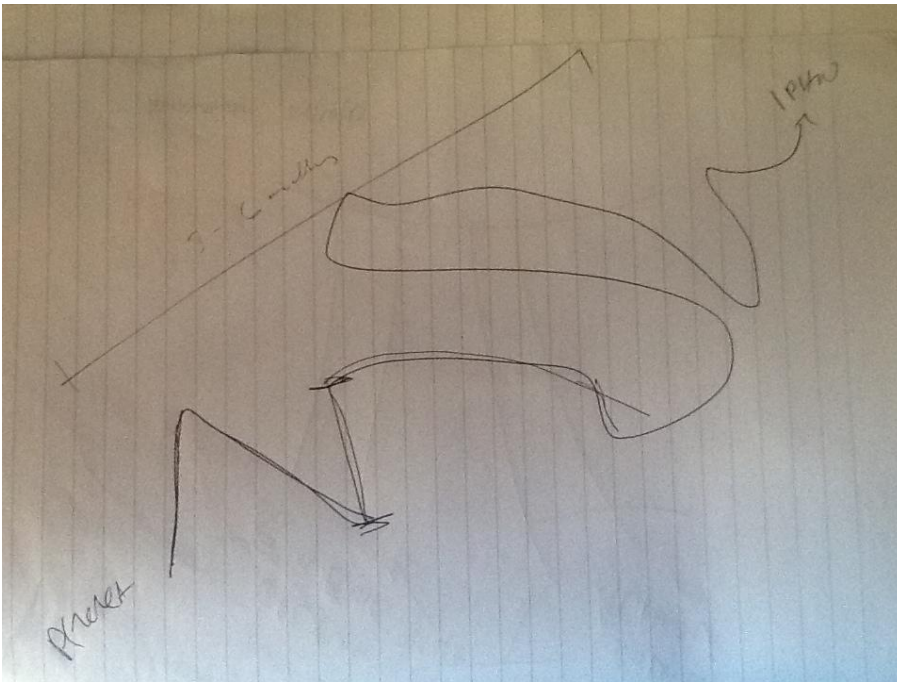
‘We just have to find opportunities to motivate employees. Employees must have the opportunity to solve problems and to make mistakes. If he has the chance to master the challenges himself, then he has a maximum degree of motivation. Through motivation personal responsibility and joy is triggered.’⁶²

‘What drives people is what they are passionate about. We should have an environment where there is room for passion. It is true that passionate people are sometimes difficult to deal with, but I feel that a natural and mature organization should tolerate such a passion. We should encourage an environment based on risk-taking and taking risks means failures. We should have many failures rather than the big one to come. And we should have ways of acknowledging people.’

The risk taking aspect is outlined in Figure 13 below.

61 See appendix I

62 See appendix I



Drawing on institutional culture (Figure 13)

‘I would see a culture based on the individual curiosity as a big enabler.’

‘I believe in an institutional culture there should be space for professors to stop spontaneously. There starts a casual contact. There must also be moments where controlled exchange takes place.’⁶³

‘A driving force for the culture is certainly the identification with the institution.’⁶⁴

‘The first thing is to create an atmosphere of mutual trust.’⁶⁵

It seems that a shared learning culture based on open-mindedness, reciprocal understanding and respect, risk-taking, individual curiosity, by giving space for intrinsic motivation, passion, and trust is seen to be a stark enabler for tacit knowledge to flow. A culture where space is given to a ‘complex process that combines doing, talking, thinking, feeling, and becoming’ (Wenger 1998: 56); where there is space for learning by doing and for the individual’s intuition to come to the surface (<http://www.zeit.de/2014/10/christophe-barraud-konjunktur-usa/seite-1>). This happens through reflection by facilitating an organizational structure based on cross-role and cross-departmental dialogue.

63 See appendix I

64 See appendix I

65 See appendix I

6.2.2.d) An organizational structure based on cross-role, cross-departmental and trans-disciplinary collaboration

Indeed, collaboration has something to do with bringing people together, enhancing the trust between the different parties, working for a common vision and specifying the desired results (Winer & Ray 1994). It is felt that, in order to be successful as an individual and as an institution, collaboration is the only powerful tool to achieve the common goals: to be competitive in the market place (Baldwin & Chang 2007). Collaboration enhances the opportunity to achieve bigger goals that can only be reached through the multiple effort of a team of scholars and professionals in order to create ‘collaborative models that move beyond the solitary tradition in academia’ (Bohen/Styles 1998: 40). Knowledge creation can be achieved through social interaction (von Krogh et al 2000) which is based on a cross-role, cross-departmental and multidisciplinary collaboration which lies in ‘the capacity to identify the latent in one’s own approach to matters, as well as the capacity to be openly attuned to (able to listen to) the latent in one’s collaborators removes a common obstacle to cross-disciplinary communication and could dramatically improve the quality and effectiveness of such collaborative efforts’ (Stone 2013:306). This means that by talking about, listening to, debating and reflecting on the respective tacit knowledge of knowledge-workers, collective improvisation and collective action can lead to the creation of something new (Glisby et al 2011). This would help both academic and professional managers develop a third space mentality where there is an understanding that looking beyond boundaries may open new horizons for the benefit of both the individual as well as for the the institution.

Some of the interviewees expressed it as follows:

‘Listening to one another and discussions are taking place within the faculty. Within the faculty we have been able to do a lot of knowledge sharing by listening to one another; by opening up; internally the communication is open.’

‘One has to have the humility that there are people who may know more than oneself; they have a different point of view; the concept of inter-disciplinarity is there to exploit synergies. The concept of interdisciplinarity is to look at things from different points of view by not assigning clear roles. This year we have organized a 'research day' where every faculty of the University gave an overview of its faculty and its competencies. Getting to know one another is already a first step. Collaborations were born that were not possible before.’⁶⁶

66 See appendix I

‘What the university has done much better in recent years is that it has involved the academic world much more by making them more responsible. Communication must function in the network, which means it must run in all directions: from left to right, top to bottom; ideally it should be done in verbal form, in a face-to-face dialog.’⁶⁷

‘Only through dialogue and through listening one can achieve understanding. If common sense and dialogue are within us then we will also understand one another better in our work environment. There is the need to talk to one another more; not only about work, but also about other topics in order to understand each other better.’⁶⁸

‘There must be time for team-building. Through the involvement of many persons things may emerge.’⁶⁹

Through dialogue, therefore, it seems that people acknowledge the value of each others respective tacit knowledge capacities more. Research has indicated that the more all knowledge-workers - academics and professionals - talk with one another the more they can create new and innovative projects. This is a climate of working together (Shattock 2003) and of nurturing the conversation among faculty in order to ‘articulate the common values and assumptions, the responsibilities and aspirations, which drive all faculty work’ (Turner & Hamilton 2007: 16). Baldwin & Chang state it in these terms: ‘Collaboration are social enterprises’, ‘brilliant ideas emerge over food’, they ‘monitor progress and assess outcomes’ (2007: 30). Whitchurch (2004) argues that the interface between academics and professionals creates potential for collaboration as, in postmodern times, individuals tend to move ‘across functional and organizational boundaries’ and continuously have to interpret their roles in order ‘to create new professional spaces, knowledges and relationships’ (Whitchurch 2008: 5). The future, therefore, might lie in Whitchurch’s third space where professional and academic activities co-exist and diverse professionals put their knowledge and expertise together in order to enhance a trans-disciplinary approach in order to create new competitive projects (Henkel 2005). Hence, by giving space to the creation of interdisciplinary Communities of Practice (CoP) such collaboration can be sustained.

6.2.2.di)The creation of interdisciplinary Communities of Practice

A CoP is a group of people who engages in a social enterprise of learning by putting their tacit knowledge at the disposal of the group in order to create something new. Through this act of

67 See appendix I

68 See appendix I

69 See appendix I

participation the co-workers learn from one another by transforming ‘who we are and what we can do, it is an experience of identity. It is not just an accumulation of skills and information, but a process of becoming’ (Wenger 1998:215). Indeed, in addition to facilitating the empathy and emotional intelligence ‘sharing tacit knowledge could increase the quality of communication among members... This shared repertoire of personal knowledge and experiences, then, becomes common knowledge that helps members establish common values in order to take collective action’ (Oztok 2012:25). By exploring one another’s tacit dimension and talking to one another alignment among group members can be achieved which will, eventually, produce ‘tremendous power to invent new realities in conversation, and to bring about these new realities into action’ (Kofman & Senge 1994:21).

The following observations have been expressed with regards to such group work:

‘Experience is something important. Now I have the feeling, now we have experience and the next stage could be to generate exchange in order to optimize.’⁷⁰

‘It is about these cross-group meetings where in the future also academic staff or, simply, people who are interested in, should participate. The two sides need to talk to one another.’⁷¹

‘We have to find time and space for formal and informal meetings with colleagues between academics and administrative staff in order to then deepen the knowledge beyond one’s own range of action and in order to understand others.’⁷²

‘Any time we do something in this sense: that the professional managers meet with the academic staff to talk specifically about the new procedures, things work.’⁷³

There is a strong desire for the formal and informal establishment of CoPs as it seems that such groups help their members appreciate the interconnectedness between academia and administration as well as the various disciplines. As stated above, instead of separating and specializing further in distinctive fields, this would lead to the creation of new projects through synergies and connections. ‘Connections’ here may refer to seeking out new and diverse experiences, questioning the status quo, experimenting with new surroundings, expanding the ‘domain knowledge’ by surrounding oneself with people from a variety of fields, and observing new contexts (Gallo 2010). Communities of Practice encourage their workers to develop attitudes and skills such as risk-taking,

70 See appendix I

71 See appendix I

72 See appendix I

73 See appendix I

and developing or/and keeping an attitude of curiosity, wonder, and amazement (Palmer et al 2010). In order to do so, another element is needed: time.

6.2.2.e) The creation of time

Knowledge creation is a craft which takes time (von Krogh et al 2000): time to reflect; time to go to a deeper level by giving space for thought-building and thought-indwelling at an individual and social level. The more time one can spend around such activities and, as mentioned above, in dialogue and trans-disciplinary and cross-departmental conversation, the more may be accomplished (Kofman & Senge 1994). Vostal (2014) refers to Ylijoki and Mäntylä's (2003) study which distinguishes four different time modes: 'scheduled time, timeless time, contracted time and personal time' (Vostal 2014:4). A special emphasis seems to be given to the so called 'timeless time' which is the time where people seem to forget about their perception of time as they get absorbed by what they are doing. Csikszentimihalyi (2004) calls such an experience the state of 'flow'. In such 'timeless time' knowledge-workers are allowed to structure their time around their own field of interest, their own fascination to dig beyond their discipline's boundaries and around their creative calling. It seems that - among all the interviewees - this aspect has been of major interest:

'Moments of community building have to be created. Recover some common moments, certain dates, certain references to the University are an important thing. In such moments one should reflect on what has been done and also on what still will be done; it is about giving the time to get from a to z.'⁷⁴

'We have to find moments where the university community sees itself as a community and where we are proud that we are something special. One must therefore find meeting moments in order for exchange to happen. This requires time.'⁷⁵

'We need more time than we have now. We should not be overburdened with work.'⁷⁶

The request for more time is tied to the notion that time is connected with the perception of academic and professional freedom to do what the knowledge-worker cares about most: knowledge construction. By doing so, the knowledge-worker feels appreciated as it gives him a sense of meaning. Informal gatherings, formal meetings, brainstorming sessions, coffee breaks, a shared

74 See appendix I

75 See appendix I

76 See appendix I

lunch or dinner, the possibility to spend one's time simply with reading - also outside of one own's field of expertise - and to follow one's inner intuition may lead the knowledge-worker to an intellectual discovery (Vostal 2014) which may result in the creation of competitive niches.

Another important enabler for tacit knowledge to flow lies in the decentralization and the decrease of bureaucracy.

6.2.2.f) The decentralization and decrease of bureaucracy

Both academic and professional managers have argued that the first signs to decentralize and to lighten the bureaucracy have been undertaken. According to von Krogh et al (2000) one of the key enablers is the right context: a context which puts the emphasis on a shared space with regards to shared responsibilities as well as with regards to short lines of communication. In such an environment knowledge-workers do not only learn knowledge 'that is embedded there, an enabling context helps create new knowledge' (2000:180).

Indeed, knowledge-workers on both sides - academics and administrators - want to feel co-responsible for the institutional achievements and claim that, if even more would be done in this field, much more challenging goals could be achieved. In addition, the small dimension of the University has been identified to be the last tacit knowledge-enabling factor.

6.2.2.g) The size

The Free University of Bozen-Bolzano can be seen as a small institution as it is formed of 104 academics and 240 administrative staff (Davenport/Prusak 2000). There is evidence that a small size facilitates short lines of communication across all institutional levels and across faculties. Due to its size a small institution - in order to be competitive - is obliged to apply an interdisciplinary work approach in order for the different disciplines to survive. At Caltech, for example, the small size is seen as 'the single most important aspect of its extraordinary global success' (<http://www.timeshighereducation.co.uk/features/caltech-secrets-of-the-worlds-number-one-university/5/2011008.article> **Caltech: secrets of the world's number one university**) where new ideas are generated over a cup of coffee: sharing tacit knowledge in order to create something new is part of the institution's fabric. This is very similar to how some of the interviewees expressed themselves:

‘We have an advantage because we are small, because in our faculty we have a leadership that has always had a clear idea.’⁷⁷

‘We, being young, small, and, perhaps, we may have also a more dynamic element that would allow us to react more quickly to certain changes in society, certain changes with regards to study courses.’⁷⁸

The small size of the institution, the decentralization and decrease of bureaucracy, the creation of more ‘timeless time’, the focus on interdisciplinary dialogue and collaboration, a shared institutional culture based on a clear vision with commonly shared objectives and, first and foremost, the appreciation of the value of each single co-worker’s tacit knowledge have been identified to be the core enablers for a tacit knowledge-enabling ba.

In the next section the third sub-research question: What are the elements by which competitive niches are created? will be analyzed.

6.3. What are the characteristics of the environment by which competitive niches are created?

It seems that the RQ ‘How does tacit knowledge sharing create new competitive niches?’ is based on the notion that tacit knowledge sharing is the core element for innovation to take place and for competitive niches to be created. By reflecting on the outcome of the empirical data we may say that there is a consensus that, first and foremost, the institutional co-workers need to have a common understanding about what tacit knowledge is all about. Only when there is acknowledgement for the huge value of this concrete internal resource, which is unique in comparison to any other institution, decision-makers may understand how important it is to invest in the human and intellectual capital of the institution (Bowman & Ambrosini 1998, Swart 2008/2010, Bowman & Toms 2010). Especially during the focus group discussion participants experienced eye-opening glimpses about the value of their respective tacit knowledge. Through the face-to-face gathering during the focus group ‘workshop’ both academic and professional managers worked in pairs and both were surprised about the power of such team work. While professional managers were amazed about the understanding for administrative matters of their academic colleagues, their academic counterparts were surprised by the strong interest in academic aspects of their professional co-workers. The use of post-it-notes helped unravel how they defined tacit

77 See appendix I

78 See appendix I

knowledge and how it may eventually be embedded in the construction of something new. Through techniques such as asking the right questions and mental mapping, strategies could be brought to the surface layer after layer which then led to agreement on the fact that each co-worker should appreciate and treasure the uniqueness that tacit offers to the group (Ambrosini & Bowman 2001/2008/2010).

Therefore, we may say that, such strategies should not only happen instinctively as it seems to be the case now, but they should be supported by the top management strategically by nurturing the human capital through tacit routines, practices and processes such as brainstorming sessions, informal and formal meetings, the creation of meeting rooms which enhance free discussion and action where there is space for ‘subversive’ thoughts in order to encourage ‘a dynamic renewal’ (Parker 2014:289), mental mapping, group work, focus group discussions, debates, active reflection, shadowing schemes and so forth. We may say that such strategies are the basis for tacit knowledge to flow in order to create new competitive niches. Such practices may have to be embedded in the management’s strategic decisions because, as mentioned by all participants, for tacit knowledge to flow the management may want to put a further emphasis on the institution’s cultural change and should therefore invest more time and space for it. Some efforts have been undertaken already, but more needs to be done.

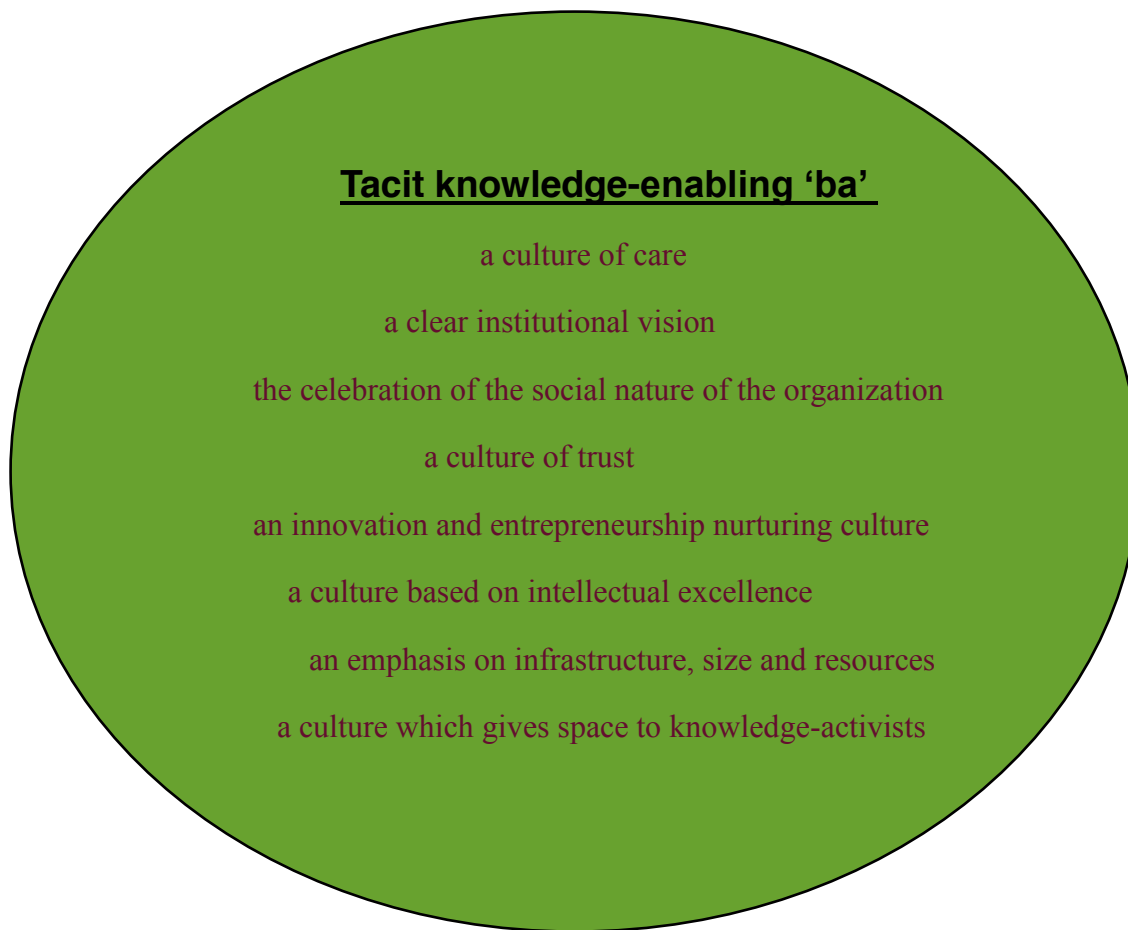
Since the literature and the interpretation of the findings above seem to underpin the notion that knowledge creation is both an individual and a social construction (Oztok 2012; Lave/Wenger 1991; Stone 2013; Leistner 2010), I agree with Leistner (2010), as outlined in the literature review, ‘that knowledge can not be managed, while tacit knowledge exchange can be facilitated by creating a knowledge-sharing enabling environment which puts a special emphasis on the social dimension of the organization’ (see literature review) as well as on the individual dimension. I would call such an environment, in alignment with Nonaka and Konno (1998), ‘ba’: a place where people are encouraged to share their tacit knowledge with one another which may happen in structured forms as well as at random: giving space to what in literature is called ‘the garbage can model’ (von Krogh et al 2000; Wenger 1998; Leister 2010) where people meet informally and, unexpectedly, something new may be created out of chaos. Such an environment is a place where there is an understanding for both the known and the unknown; where the unknown may be seen as something which can be discovered as there is an understanding that ‘absolute knowledge’ exists and, by giving a special emphasis to the tacit dimension of knowledge at an individual and a collective level, the absolute truth may be discovered in moments of intuitive imagination. Such a knowledge view is open for the hidden which may ‘be revealed’ (see literature review) through the creation of

a knowledge-enabling culture that gives space to the following characteristics by which - according to this study - new competitive niches may be created (Table 5):

Characteristics of ‘ba’ (Table 5)

Themes
<ul style="list-style-type: none">a) a culture of careb) a clear institutional visionc) the celebration of the social nature of the organizationd) a culture of truste) a innovation and entrepreneurship nurturing culturef) a culture based on intellectual excellenceg) the emphasis on infrastructure, size and resourcesh) a culture which gives space to knowledge-activists

These characteristics of the environment by which competitive niches are created may help the decision makers to take further steps in advance with regards to the FUB’s competitiveness in the local, the regional, the national and the international market place. Indeed, competitiveness seems to be reached by giving the tacit dimension the appropriate attention as it is right there where new products and services can be created. Explicit knowledge is old knowledge, while tacit knowledge sharing allows the individual’s creative power to emerge and, through participation and engagement between various co-workers, new ideas may come alive. For this to happen a tacit knowledge-enabling culture is needed where all mentioned characteristics have to be incorporated equally as outlined in Figure 14 below:



The characteristics of 'ba' (Figure 14)

The first characteristic in which such a 'ba' is grounded is a culture of care.

6.3.a) A culture of care

An institution where there is a culture of care may be defined as a 'knowledge-aware organization' (Leistner 2010:64) which is based on a learning culture in which the value of each co-worker's tacit knowledge is valued by appreciating and caring about their respective expertise, personal and professional skills, their hidden knowledge which may be found between the lines as there is an understanding that each co-worker knows more than they can tell (Polanyi 1976; 1978;2009). This applies to both academics and administrators alike. By giving space for reciprocal exchange the understanding for the respective roles, behaviours, processes and competencies seem to be enhanced which will result in more fluent ways of knowledge flow (Leistner 2010). One of the interviewees expressed it in the following way:

'Niches will open up when we will find other forms of knowledge transfer in general - when one recognizes the added value: I have to give respect and attention. Knowledge means understanding

the other. I have to build upon the situation the other finds herself/himself in. The understanding, where there are constraints, is also knowledge transfer. Contextually I must be at the same level and, only then, I might have found the channel by which you can communicate. I must ask the right questions.’⁷⁹

This interviewee seems to highlight the importance of such reciprocal understanding which may also result in the rediscovery of the value of contradiction as a creative force for knowledge creation (O’Donohue 1997). It seems that, giving space to a holistic dimension of knowledge exchange - professional as well as personal development initiatives such as moments of mindfulness (see below)- may result in the creation of collective knowledge which, eventually, will get embodied in the organization (Stone 2013) because, by doing so, knowledge-workers will develop a stronger sense of belonging with the institution. And this may be seen as a strong asset for competitive advantage (Swart 2011; Shattock 2003).

As a positive example with regards to the creation of a competitive niche the Faculty of Education organized an event called EXPO Games from the 14th to the 16th February 2014: an exhibition dedicated to families, students and teachers of all school levels with the emphasis on the word ‘playing’ instead of on the word ‘game’, hence on the aspect of constructing together, instead of consuming only. Twenty-five play stations had been created where all participants were put in the condition of finding out, discovering, creating, using their tacit knowledge and exchanging it with others; 500 board games, a variety of conferences, workshops and debates engaged all participants and gave the FUB considerable space in the local, regional, national and international media. Indeed, according to both, professional and academic co-workers, the realization of this ‘niche’ could only be put in place because of the continuous and flexible tacit knowledge sharing approach among all co-workers. The attitude of care for the respective co-workers’ ideas, their flexibility and the openness of all parties allowed the event to have a huge opportunity to become an institutionalized product which will also give the University further competitive advantage in the future. Indeed, further projects of this kind are under development.

79 See appendix I

This leads us to the second characteristic of a tacit-knowledge-enabling 'ba':

6.3.b) A clear institutional vision

It is crucial to have a strong institutional vision because the effective and efficient delivery of it will shape all co-workers' minds, hearts and souls (Black 2010; Kotler 2010; Steele 2010). Their commitment, their wish to contribute to a higher purpose, their desire to create something new will influence their work attitude which will eventually lead to an increased participation, engagement and better performance (Lave & Wenger 1991; Wenger 1998). The shared institutional vision has proven to determine the institutional values, beliefs, aspirations and vision with which all knowledge workers are able to identify. Mutual engagement may culminate in a 'negotiated joint purpose' (Handal 2008, in Bacon 2009:14) since clarity about the institutional vision may result in the creation of a positive and coherent image in the minds and hearts of staff (Shattock 2003). The identification with the institutional vision is seen to be one important driving force for knowledge-workers to engage proactively in tacit knowledge-exchange practices (Gioia 1996; Stone 2013) where the shared individual tacit knowledge moves towards the construction of a new reality in the interest of the group (Goleman 2006). For this to happen, each individual co-worker's contribution is needed. One interviewee refers to it as follows:

'We ought to be fast in identifying the needs of the region by winning the hearts and minds of the region. You don't put yourself as being the big chief. We should stop building and rather share something we have done. And I don't think that buildings make any sense because people are the driving forces for the University.'

There is a clear calling to direct the vision towards content instead of putting the emphasis on the hardware such as buildings. The institution may want to reflect on what its vision of being a trilingual and intercultural educational context is supposed to be. By communicating the vision clearly new products and services may arise if interactional conversation and participation gets the needed attention.

An example of where a clear vision translated into competitive niches I should mention is the Vertical Maths Programme that the educational institution I am working with has established. Driven by the institution's vision of 'Setting young minds free', among other services, in a collaborative endeavor between management and teaching staff the Vertical Maths Programme was meant to give Mathematics a special space at an institutional level. In order for all stakeholders, in

particular the students, to understand that ‘Mathematics is absolutely everywhere’ (du Sautoy 2014:13) and that the understanding of the mathematical language opens new horizons as it may give one the power to change and influence the world around us, the programme’s aim is to transfer the beauty and joy of Maths to all stakeholders. Indeed, during one period per week and during so called Maths Weeks the entire institution dedicates its time on commonly shared mathematical concepts and collaborative activities which go beyond the traditional teaching. This is geared to activate the participants’ learning skills. Cross-level and trans-disciplinary activities which allow the participants to see Mathematics beyond mere numbers - in nature, in music, in architecture, in technology, in philosophy - to the idea to prove new things have helped change the mindset of all students, parents and teachers alike. The Vertical Maths Programme has been institutionalized and as such it gives all stakeholders time for reflection and space for conversation in order to go beyond the preset planners by keeping an open mind for creativity to arise. The Programme has developed into one of the core niches of the institution as it is the only one which offers an education in Mathematics which engages the entire institution. For this to be successful the knowledge-enabling cultural environment has to be people-oriented which leads us to its third characteristic:

6.3.c) The celebration of the social nature of the organization

As well as the celebration for the individual dimension outlined in the first element ‘a culture of care’ the third characteristic lies in the celebration ‘of the social nature of the organization’ (Swart 2002:11; see literature review). The social dimension relates to the importance of making the group work together, by understanding and learning how to interact in order to gain a better insight about oneself, the group and the organization (Goleman 2006). Stone calls this the ‘interactional expertise’ (2013); while Oztok (2012) distinguishes the bonding and the bridging of social capital. The bonding ‘would make tacit knowledge available to and useful for other members’ (Oztok 2012:30) of a community of practice while bridging refers ‘to relationships with people from other communities’ (Oztok 2012:30). The prerequisite for this to happen is that all co-workers recognize the value of other members’ tacit knowledge and that they look beyond the boundaries of their respective disciplines/fields in order to shift from the pure individual interest towards the collective interest through cross-institutional and trans-disciplinary conversation, participation and engagement (von Krogh et al 2000; Whitchurch 2008). This leads - as mentioned in the literature review - to the creation of a collective organizational knowledge (intellectual capital) that may result in collective action (Stone 2013).

The following comments underpin the above:

‘In the ideal world the University administration would understand how the University works.’

‘Much mutual dialogue and exchange is necessary that you really get to know one another. And that could be solved by daring to share more and more: by sending once someone from the administration into academia and vice versa.’⁸⁰

Such reciprocal understanding may take place over a cup of coffee because the social nature of tacit knowledge sharing is celebrated throughout the institution.

Indeed, it seems that the Faculty of Computer Sciences has developed a niche over a cup of coffee. Its ICT programme for young female students, with the aim to help them to understand the language of technology and for them to function thereafter as ambassadors in their respective institutions where they are meant to share their knowledge with their counterparts as well as with their teachers, were designed over a cup of tea and by talking to one another. The Dean of the Faculty of Computer Sciences strongly wanted to create a network of knowledgeable ICT people in high schools. In order to break through the traditional conceptual thinking that ICT is only a male domain he - together with his co-workers and his students - developed a programme for female students. Their acquired knowledge was meant to be shared, but, first and foremost, it was meant to teach themselves and the local society about the potential of young female students if they are exposed to technology and if they are allowed to be intellectually nourished accordingly. The celebration of the social nature of the institution allowed this niche to emerge and to be incorporated into the Faculty’s teaching offerings. As such it helped to build a competitive and favorable positioning for the faculty.

6.3.d) A culture of trust and openness

As mentioned in the literature review, another element of a tacit knowledge enabling ‘ba’ lies in a culture of trust and openness where both academics and professional managers are willing to celebrate the unknown by being sensitive to the integration of both the scientific and the absolute knowledge in their intellectual endeavours. An openness towards such an approach may lead knowledge workers towards an experience of ‘being’, rather than an experience of ‘seeking’; it may give rise to a view of knowledge based on ‘the world as a woven texture of world lines in space and time, with everything moving freely’, connected by ‘a unifying principle that would either explain

80 See appendix I

everything or explain nothing' (Feynman, in Gleick 1992: 7). For this to happen, time is needed as there will be given space for co-workers to spend on 'timeless time' (Vostal 2014) such as wandering around, being perceptive for the unknown to happen, for the creative intuitive imagination to appear, for dialogue to take place and so forth. Indeed, Albert Einstein's quote: 'Imagination is more important than knowledge' may emphasize this aspect. I would, therefore, argue that our culture should not see speed to be a virtue (Schulte 2014), but rather give knowledge workers the opportunity to translate their approach to working life into quality time where there is space for the human being to develop as a whole: mind, body and spirit by keeping, as the German philosopher Martin Heidegger wrote, both life and death, the here and there, the known and the unknown in mind (Schulte 2014). Such an approach may be defined as a 'ba' based on mindfulness which is based on the acceptance of the present moment by not being distracted by the past nor the future. Such awareness keeps knowledge-workers focused on the now by being open for surprises - for the unexpected to happen (Nonaka & Takeuchi 1995). Such a knowledge culture is not tied to deadlines; it rather expects their co-workers to take risks, experiment, discover by trusting the process of the flow (Csikszentimihalyi 2004). This may then result in something new - a competitive niche - to be discovered.

The following reflection confirms the above:

'One simply has to allow people to transfer their individual knowledge more freely and to take the risk by being open for the adventure in research and in teaching. It is important to create space for meaningless gatherings by cultivating the inter-disciplinarity.'⁸¹

As an example for such an approach I would like to mention the establishment of staff rooms which, in the educational institution I am working in, are called creative collaboration centres. These rooms are characterized by their informal and cosy environment with sofas and armchairs, coffee machine, drinks and some finger food available for staff to feel at ease, as well as a formal space with hardware for staff to use so that emerging ideas can be put down in writing and then presented at formal staff meetings or in conversations with the management. Due to these spaces and due to the allocated time made available for staff to spend there, a variety of new ideas came to the surface and were then - in collaboration with the respective others - put into place. One niche which - through trust and openness - has been integrated is the emotional intelligence programme of the institution which integrates exercises of mindfulness in class as well as during staff meetings into the institution's daily approach. Indeed, the day starts by giving space to stillness and by

81 See appendix I

helping students and staff appreciate the ‘Now’ (Tolle 2006). The institution is recognized as an institution where the individual wellbeing is part of the educational approach and as such it has become a niche which distinguishes itself from potential competitors.

6.3.e) A culture that nurtures innovation and entrepreneurship

A culture of trust and openness where there is space for adventure, risk-taking and innovation leads, inevitably to the next tacit knowledge-enabling characteristic for a knowledge-enabling environment in which new niches may be created. In such a ‘ba’ the focus goes on the use of the language and its common understanding: language shapes the way we understand and interpret a given situation individually and collectively. Indeed, language has an impact on behaviour. That is why it is important for all co-workers to gain a common understanding of the language through the process of interaction. For this to happen, collective reflection takes place in order to reach - through multiple interpretations from different perspectives - a common ground which may result in the creation of something new (Slater & Naver 1995). Such an environment may lighten the bureaucracy wherever possible and may adopt a more decentralized approach in order to give all co-workers sufficient autonomy in their knowledge-creating process where there is space for innovation, co-responsibility and a sense of entrepreneurship.

One of the knowledge-workers expressed it as follows:

‘We need to talk to one another about these topics. It takes a moment of reflection and analysis, where we respond to each other and everything will be discussed with all stakeholders.’⁸²

In the following comment one knowledge-worker describes the results which could be achieved by applying an innovative spirit in a moment of constraint:

‘Some time ago I went to Paris to prepare - together with an administrative staff member - an exhibition. We went directly to the building where the exhibition took place. Since nothing had been prepared, I myself, alongside my administrative co-worker, displayed the exhibition. This collaboration led to mutual understanding. A lot of knowledge was transferred. They learned that I can change my attitude and that allows other things to happen. By being a role model.’⁸³

In addition, the climate of risk-taking and innovation led one Dean to organize for the third time in January 23rd 2014 an Entrepreneurship Evening with the topic: Startups, Energy, Passion,

82 See appendix I

83 See appendix I

Networks with the aim of promoting entrepreneurship, innovation and startup economy in South Tyrol. This specific niche is/was meant to bring together Business and academia, young entrepreneurs and experts in order to ‘see, celebrate and challenge the bright minds of the students who present their tested business ideas in front of a global audience’ (<http://franzmagazine.com/2014/01/22/startups-energy-passion-networks-pekka-abrahamsson-entrepreneurship-evening-2014/>). These students worked in multi-disciplinary teams together with experienced mentors locally and internationally. This initiative has now developed into an institutionalized niche which is offered to the student-body on a yearly basis.

6.3.f) A culture based on intellectual excellence

Another characteristic of a ‘ba’ which promotes the creation of competitive niches may lie in the given intellectual environment co-workers work in. There is evidence that academics in particular, but also professional managers, benefit from an intellectual environment that stimulates knowledge acquisition and knowledge creation. Such an environment may instill in co-workers a further love and passion for what they are doing by increasing their ‘desire to make it work no matter what challenges are encountered on the way’ (Leistner 2010:59) as they feel that being surrounded by the right people helps them to grow as an individual as well as in a group. Such collaboration may go beyond institutional walls by establishing a ‘mènage a trois’ (Reichert 2006:17) which is based on the collaboration between universities, politicians and the entrepreneurial reality in the area. At FUB the first course, initiated by the two neighboring universities (Bozen-Bolzano and Innsbruck), has been offered in the academic year 2014-15.

One interviewee mentioned this example with a perceived sense of pride:

‘The Euregio which is going to cover the old ‘Habsburg’ region as a single pool of interest: in order to create an axis of cooperation we have created a master course on the management of mountain environments which we do in cooperation with Innsbruck. There is one only council for the course. The governance of the course is cross-institutional.’⁸⁴

It appears that, by dwelling in the tacit dimension within the two institutions mentioned above, the following new competitive niche has been created: Master in Environmental Management of Mountain Areas. The institution promotes this new niche by stating that a ‘common understanding that environmental problems should be solved by an international and interdisciplinary cooperation’.

84 See appendix I

(https://www.unibz.it/en/sciencetechnology/progs/master/environmental_management/default.html) Since both institutions are located in the Alps this Master Programme focuses on both the ecological as well as the socio-economic aspects of ecology and mountain management. A strong collaboration between the two countries is meant to further emphasize the uniqueness of this market niche.

6.3.g) An emphasis on infrastructure, size and resources

Another competitive characteristic for a knowledge-enabling 'ba' lies in the infrastructure, its size and its resources (Davenport/Prusak 2000; Ronen/Pasher 2011; Leistner 2010). The physical environment has a very strong impact on how knowledge flows. As we have discovered in the findings, the physical separation between the central administration and academia, the physical distance between the three different campuses, the long corridors, the perceived sterile infrastructure, which does not seem to allow people to meet, have been seen as a very strong barrier for knowledge to flow. Indeed, although the interviewees acknowledged the fact that the University looks modern the majority of them made suggestions for the infrastructure to change. They would prefer 'open spaces', informal meeting rooms, cafeterias in the middle of the corridors, auditoriums with a 'stage-like' arrangement like the Greek 'agora' in order for conversation to take place. The institution's size would be ideal for knowledge to be shared since the small size arrangements (around 300 employees according to Davenport & Prusak 2000) seem to enhance short-line communication and interdisciplinary and cross-level collaboration. A small size also allows the individual co-worker to emerge as it is easier to get to know one another and the institution to take advantage of her/his personal tacit knowledge by enhancing face-to-face gatherings and formal meetings as well as the use of 'cyber ba' (von Krogh et al 2000:258).

In order to underpin this aspect the example of the creative collaboration centres can be mentioned again. The informal space and the time people are allowed to spend with one another have led to the creation of further niches such as the development of the Bring Your Own Device Programme (BYOD) through which each student is encouraged to use her/his own device in the educational institution. It is not meant to be a learning tool only, but rather a tool to redefine learning as well as a tool to design new ways of collaboration such as the use of google drive and google apps for education. Here, students and all participants realize that 'cyber ba' allows them to collaborate at any time they want - even if they are geographically distant from one another. Due to the fast-paced learning curve of those students who undertook this programme, they developed such skills that they were asked to present their knowledge to University professors as well as to teaching staff from primary school up to secondary school. Indeed, the niche has been recognized by external

stakeholders as a strong asset which led to a stronger collaboration between the educational institution and industry as well as a higher education institution in the region in order to take the niche to a research level.

6.3.h) A culture which gives space to knowledge-activists

The final, but not least, important element for competitiveness with regards to the creation of new niches seems to lie in the appointment of ‘knowledge brokers’ (Reichert 2006) or ‘knowledge activists’ as von Krogh et al (2000) call them. Such professionals seem to bring a blended work mentality (Whitchurch 2008) with an understanding for the different perspectives; their strength lies in their networking abilities by bringing people together, by understanding who works best with whom, by identifying where and how knowledge and ideas can be cultivated and activated, by breaking down boundaries because they function as bridge-builders between co-workers, and by looking for areas of interaction which may then rise to the establishment of something new. They also see in the social construction a knowledge creation opportunity by mobilizing the co-workers’ energies and by facilitating participation (Lave & Wenger 1991; Wenger 1998; Oztok 2012).

The following comments confirm the above:

‘An academic has a great idea and we (knowledge brokers, note by the author) say what tools can be used.’⁸⁵

‘We require in faculty such intermediate personalities. We need to create a ‘blended’ support.’⁸⁶

As an example of success for such a blended professional the actions of the Vice-Dean and former Dean of the Faculty of Design and Art should be mentioned. In his capacity as Dean he was an advocate for releasing the Faculty of Design and Art from the rigid boundaries of the Bologna regulations by offering multicultural, project-oriented and trans-disciplinary courses which have reached recognition beyond the local frontiers. Due to the faculty’s success - in collaboration with the Faculty of Economics and Management, the Faculty of Science and Technology as well as with the Faculty of Computer Science - a new Master’s Programme in Global Design will be offered starting in the academic year 2015-16. FUB promotes this new course as follows: ‘The forthcoming biennial Master of Arts in Global Design promotes the study of eco-social transformations, focusing on local developments and their interplay within global contexts. It enables young creative professionals to design for more sustainable practices of production, consumption and living,

85 See appendix I

86 See appendix I

approaching products, interactive applications and communications. Students learn to work on design projects equipped with a transdisciplinary set of instruments beyond design, gathered from social and environmental sciences, economics and business, technology and crafts.’ (<https://www.unibz.it/en/design-art/progs/glocaldesign/default.html>) As such, the ‘enlightened’ and blended work approach of the Dean has led to the development of strong competitive niches in this area and beyond and, perhaps, the FUB may use this as an example to invest even more in such personalities.

The above mentioned eight characteristics seem to be responsible for the creation of a knowledge-enabling environment which is paramount for the creation of competitive niches. Indeed, a focus on both the individual as well as the social dimension of tacit-knowledge sharing has to be given in order to give rise to a ‘ba’ based on care, a strong shared institutional vision which may result in a strong institutional culture where both academics and professional managers work together based on trust, risk-taking, innovation, open-mindedness and intellectual excellence. Knowledge, therefore, has to be seen from a holistic point of view and - as outlined in the literature review - and from different angles, and open to intuitive insights as well. This may lead to the discovery of new niches simultaneously (Polany & Prosch 1976). Hence, each single characteristic mentioned above may be seen as possible stepping stones towards the establishment of such a ‘ba’.

The above is an idealistic outline of the cultural situation for tacit knowledge to flow. The reality is not yet there. In order to reach, however, such a culture it may make sense to design it strategically. In the next chapter I aim, therefore, to outline the theoretical contribution for tacit knowledge to flow in order for HEIs to become successful competitive market players among others (Barber et al 2013). In addition, I outline some practical recommendations as well as possible implementation challenges which FUB (Free University of Bozen/Bolzano) may want to consider in order to view and treat the tacit dimension as one of the most valuable internal resources the institution possesses by using them accordingly. Finally, I also aim to analyze how the knowledge-enabling culture outlined in 6.3 may be achieved.

7. Contributions and recommendations

The ideal situation outlined in chapter 6.3 is not a straight-forward enterprise as reality is shaped by many different variables. After outlining the theoretical contributions, the practical recommendations and possible implementation challenges at FUB, I reflect on how a knowledge-enabling 'ba' as described in chapter 6.3 can be made possible (see 7.3).

7.1 Theoretical contributions

7.1.a) A holistic knowledge concept

The outlined knowledge concept is based on a holistic view of knowledge which integrates knowing what, knowing how as well as knowing why. Furthermore, such a knowledge concept is open for the appreciation of the absolute knowledge that may only come to the surface in moments of awe, meditation and stillness. Although it recognizes the explicit knowledge in written texts of any form, it also emphasizes the importance of tacit knowledge as, only by dwelling in a given subject, reality, study or situation, a person can make sense of the given information. Information as such is meaningless (Wenger 1998), although the flood of information has grown exponentially. Indeed, 'Every two days we create as much information as we did from the dawn of civilisation up until 2003' (Barber et al 2013:17) and information is basically immediately accessible and everywhere. Nevertheless, there is more than ever a cry for the concept of holistic knowledge - knowledge which incorporates it all - where the tacit dimension becomes the core element of making sense of the flood of information by being able to make connections between and beyond disciplines in order to allow break-through ideas to emerge from deeper layers within (Barber et al 2013). Such an understanding of knowledge may give the tacit dimension its deserved importance, as it is a unique fountain of inspiration where the individual's talent may come to the surface. Albert Einstein may be right when he said: 'I am enough of an artist to draw freely upon my imagination. Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution.' What Einstein calls imagination, I would call the absolute knowledge: a reality, which is at the person's reach in moments of stillness, meditation, and absolute faith for the surprising to happen. In the HE context, I would argue that a holistic view of knowledge would give rise to more holistic approaches of learning, teaching and research. Indeed, my findings indicate that the fragmentation of course offerings (Naim 2014) has led to an over-specialization where individuals are able to see the details but unable to understand the elephant as a whole. It is evident from both the literature review and the collected data that today's society, however, develops more and more into a learning society where there is a need for 'citizens

ready to take personal responsibility both for themselves and for the world around them: citizens who have, and seize, the opportunity to learn and relearn throughout their lives' (Barber et al 2013:3) That is why HEIs may want to reflect on their responsibility to help society move in that direction by being ready to embrace a knowledge concept where the tacitness becomes one of its core resources for courageous learning, teaching and research approaches to take place, and where the individual is valued as a unique source of contribution and where, through collaborative projects, new break-through ideas will unfold in new services and products. This leads us to the second contribution of this study: the validity of the resource based view of Human Capital where each co-worker is seen as co-creator of knowledge.

7.1.b) The value of human capital as unique source of competitive advantage

My findings indicate that the human factor is a key resource for competitive niches to emerge because a co-worker who feels valued is also willing to share her/his tacit knowledge with others. By doing so, a mindset-shift may take place as the focus does not lie in standardized textbooks, but rather in building 'achievement on discovering the individual talents' (Robinson 2009:238) of each co-worker by designing a knowledge-enabling environment (ba) where they learn with and from one another in such a way that creative outputs will be reached. The findings indicate that such a 'ba' can be made possible if decision-makers invest in the RBT (resource-based theory) where each co-worker's tacit knowledge is seen to be the most powerful 'simultaneously valuable, rare, imperfectly imitable and imperfectly substitutable'...'source of competitive advantage' (Ambrosini & Bowman 2010:439) as outlined below. The data have proven that through such a collaborative enterprise new cross-departmental programmes can be created which are relevant to move society forward (Barber et al 2013; Palmer 2010; Shattock 2003). Therefore, HR (Human Resources) practices should employ both professional and academic managers with a third space mentality (Whitchurch 2008) who can be called 'mavens' (Naim 2014) or 'synthesisers' as Barber et al call them (2013). These are professionals who are capable of seeing beyond their own field of expertise as they see reality as an interconnected and interwoven entity and as such they are able to face the complex challenges of today's society. The focus lies on the appointment of the right person, rather than an appointment to fill a position. Such HR strategies may require more time and patience, but will lead to lasting results as co-workers feel valued and, as the findings show, they engage even more in their respective roles in the long run. 'By sharing their experiences organizational members can achieve an improved level of understanding' (Ambrosini & Bowman 2010:947) of mechanisms which are involved in specific activities and this seems to have a positive impact on the outcome. It is evident from the data that through tacit knowledge-sharing practices the desire for collaborative projects increased significantly. Hence, managers should invest in conditions which facilitate cross-

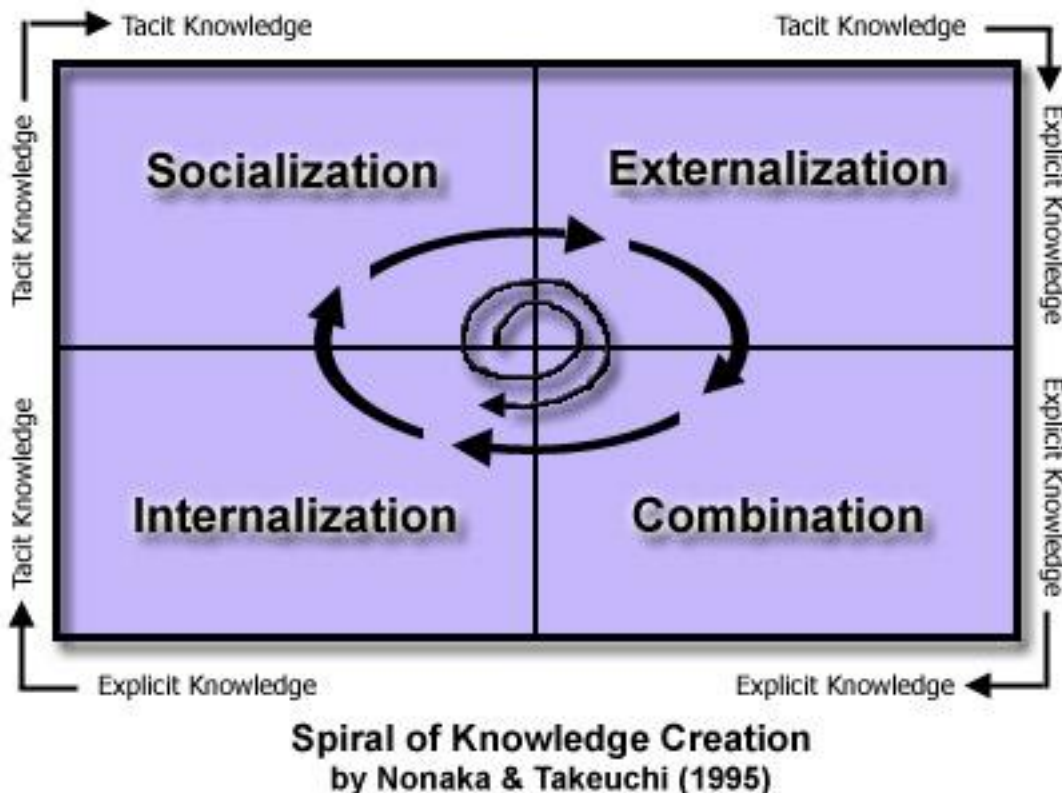
role, cross-departmental and trans-disciplinary conversation. Such practices should be embedded in the management's strategic decisions because, for tacit knowledge to flow, management must put a further emphasis on the institution's cultural change if they want to retain their staff and if they want to enhance the institution's reputation among stakeholders. There is evidence, I would argue, that the enhancement of a knowledge-enabling 'ba', hence, that the socialization quadrant is the key quadrant for competitive niches to emerge. I contribute to theory by arguing that the socialization quadrant may be seen to be the starting point for managers to design an institutional 'ba' by developing an understanding for its enablers and its barriers and by acting upon them accordingly.

7.1.c) The SECI model redesigned

My findings resulted in satisfactory answers to the research question 'How does tacit knowledge transfer create competitive niches at HEIs?'. The empirical study aimed to focus on what Nonaka & Takeuchi (1995) call the tacit knowledge transfer in the socialization process: and concentrated on the interaction between the different co-workers at senior management level within the 'Free University of Bozen/Bolzano (FUB). Although each quadrant of the SECI model is important, I aimed to find out where to start from if we were to reinvent the wheel. Thus I wanted to find out where the basis for tacit knowledge sharing may take place. The literature did not seem to give me enough empirical evidence to gain sufficient insight and, accordingly, I felt intrigued to fill this gap (Ambrosini & Bowman 2001; Swart 2006, 2011). I wanted to start with a blank mind - a 'tabula rasa'. I wanted to find out where it all starts from and it appeared that it would make sense to investigate the notion of what tacit knowledge is all about and how tacit knowledge sharing can lead an institution to be competitive. It appeared that, by celebrating the tacit knowledge of each co-worker and by nurturing their environment in such a way that tacit to tacit knowledge sharing can take place on an ongoing basis, the individual co-worker would find her/himself valued and therefore ready to share their experience and their hidden knowledge with others.

I based my study, as mentioned above, on the theoretical framework of Nonaka & Takeuchi's SECI model of knowledge creation (1995) where, according to the authors, knowledge-sharing takes place in four modes: socialization, externalization, combination and internalization. The socialization takes place through face-to-face communication and shared experience. It is a 'tacit to tacit' knowledge-sharing. In the externalization mode, concepts are developed in order to put the combined shared experience into a common language. The use of analogies, story-telling or metaphors help to find this common ground. Analogies, for example, help to 'see something novel in a familiar light' (Gallo 2010:89), so that new creative connections can be made. This is a 'tacit to explicit' knowledge-sharing and it unfolds in the production of written material. In the combination mode, the newly created explicit knowledge will lead to the creation of prototypes of new

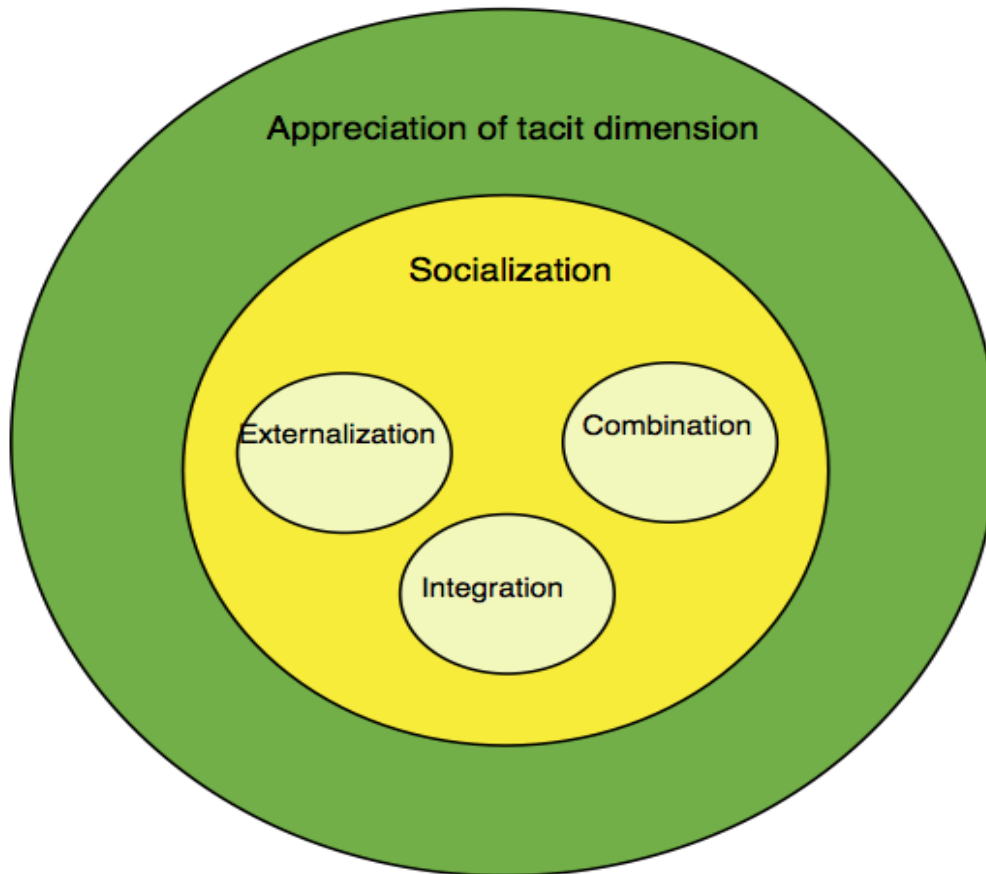
knowledge; for example, training courses or formal education programmes can be seen as a combined knowledge-sharing process. Here ‘explicit’ knowledge leads to ‘explicit’ knowledge. The internalization is the process which could be called ‘learning by doing’, where explicit knowledge becomes tacit again and becomes part of the mental model, the mindset of the individual. As such, so argue Nonaka and Takeuchi (1995), it will eventually be shared by more and more members of the organization and this is an important aspect to reinforce the company’s organizational culture (see Figure 15 below):



Spiral of Knowledge Creation (Figure 15)

According to the critical investigation of the knowledge concept (Nonaka % Takeuchi 1995), it seems that all knowledge derives originally from tacit knowledge originally as it is a person's own personal knowledge and his/her experience and skills, whereas explicit knowledge, on the other hand, is the formal and codified knowledge open to everybody via documents in a systematic language. I would argue, that all explicit knowledge is tacit knowledge to start with and, in order to create competitive niches in HEIs, it is deemed to be essential to facilitate the knowledge flow between all co-workers in order to be successful among many others. That is why I gave the socialization quadrant my full attention as the face-to-face conversations seem to help unravel the hidden in order to bring something new to the surface.

For this to happen, it appeared important that a tacit knowledge-enabling ‘ba’ (Nonaka & Konno 1998) is, alongside the understanding of the huge value of tacitness and the appreciation for/of each single knowledge-worker’s tacit dimension, the basis for new knowledge to be created. I would, therefore, suggest that the theoretical framework be adjusted as follows (Figure 16):



SECI-Model redesigned (Figure 16)

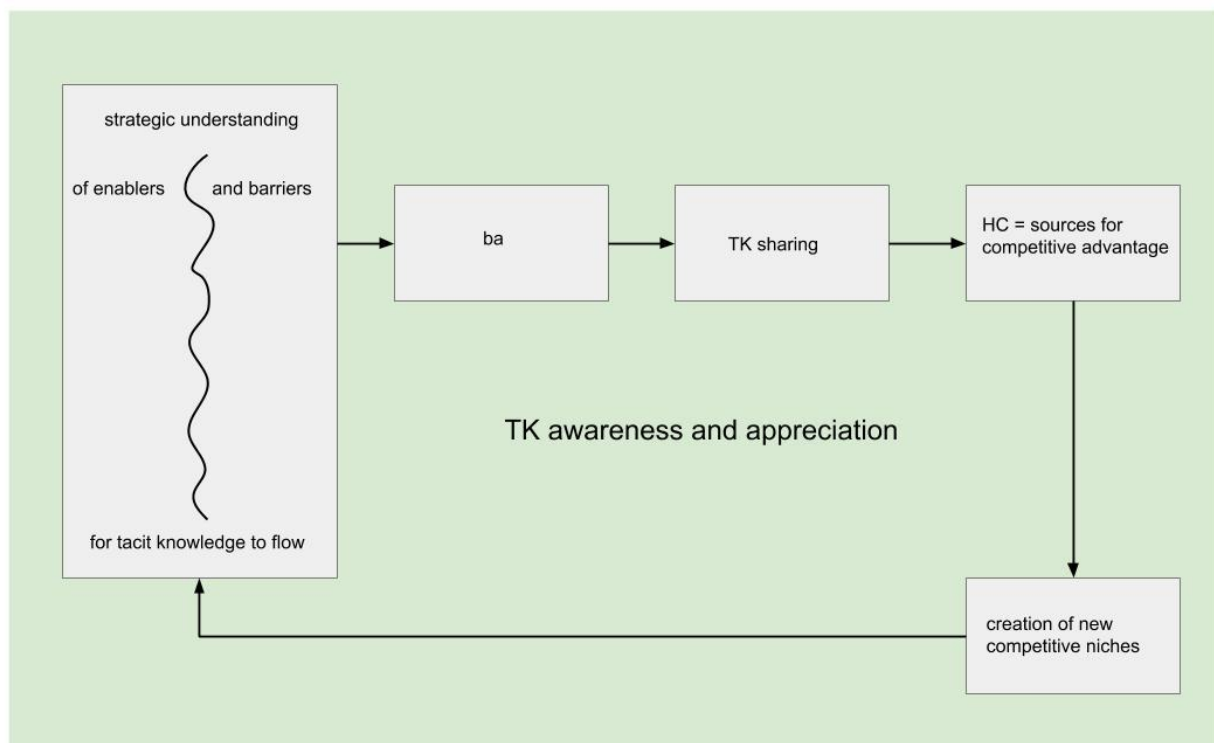
I would see the socialization dimension to be embedded in the appreciation of the tacit dimension, which may be sensitive to the integration of absolute knowledge - knowledge (see chapter 2), which may be experienced in glimpses of intuitive insights as outlined above. On the other hand, there must be a clear understanding that human beings construct knowledge and hence, it is dependent on both individual components, such as a person’s personal talents, self-perception, motivation, assertiveness, creativity and experience, as well as on collective components such as a person’s cultural and historical background. In comparison to the absolute knowledge, such knowledge will always be limited. However, by giving space to the celebration of the tacit dimension, such as mindfulness exercises, knowledge workers would be given time to relax by emptying their minds in order to be receptive for the ‘surprise’ - the creative idea - to emerge from something which is at a deeper - non apparent - still unknown level (Schumpeter 2014, Tolle 2005).

An environment which nourishes the appreciation of - what I would call - a deeper level, is a 'ba' where the attention goes to both the individual and the social dimension of tacit knowledge sharing. Hence, as mentioned above, knowledge is understood holistically: from a perspective, which integrates all aspects of tacit knowledge (knowing how, knowing what, knowing why) as well as the intuitive insights of the respective individuals. Therefore it would seem that at the heart of what Brewer & Brewer (2010) call 'knowledge-based organizations', there is given space for a conversation across all ontological levels in order to give - through purposeful tacit knowledge exchange processes and practices - a special emphasis on the socialization aspect based on Bennett's developmental model of intercultural sensitivity (2004) via which co-workers learn to move from an 'ethno-centric' to an 'ethno-relative' mode (see literature review). The latter is a mode where, at its best, a person may reach an integration state by being easily able to move in and out of different cultural world-views. This may help co-workers build a sense of empathy and reciprocal understanding which may then lead - via externalization, combination and internalization - to the discovery of new niches simultaneously (Polanyi & Prosch 1976). Indeed, I would see these three steps integrated in the socialization quadrant as all will, eventually, happen through shared experiences in the socialization quadrant.

7.1.d) The socialization quadrant in the HE context

Accordingly, as mentioned in 7.1, if we were to start from scratch again, I would argue that an HEI may want its management to design an institutional culture which would strengthen the respective enablers and also identify possible barriers of a knowledge-enabling 'ba' by implementing purposeful tacit knowledge-sharing routines and practices on a regular basis. Academic and professional managers would function as ambassadors for such a culture to be spread and amplified throughout the institution. This would lead to a 'ba' which is based on the resource-based theory (RBT) which puts the human factor in first place as it is people who create success because their individual tacit knowledge is rare, not substitutable and hardly imitable (Bowman & Ambrosini 1998; Ambrosini & Bowman 2008/2010). Such a socialization quadrant is promoting the value of tacitness and the appreciation of the co-workers respective tacit dimension. This would result in HR practices which put their emphasis on the appreciation of the uniqueness of the individual by adopting a person and value-driven approach over a position-oriented recruitment approach where the talent of the individual co-workers, their personality traits, their tacit and transferrable skills count more than finding a fit for a standardized job description. It would be more about finding the right individual among many others by nurturing their individual talent and by enhancing the interaction among both professional and academic managers in such a way that through their

respective participation and engagement (Wenger 1998) break-through ideas may emerge. By dwelling in the uniqueness of each single co-worker's tacitness their respective knowledge will, eventually, result in the creation of new competitive niches such as services, products, projects that move society forward (Newport 2012; Palmer et al 2010; Pressfield 2002). The creation of new competitive niches would then underpin the value of developing the respective enablers and the importance of identifying potential barriers of tacit knowledge to flow. By working on such a socialization quadrant at HE level the foundation for competitiveness may be laid as this would enhance the creation of think tanks and the development of breakthrough ideas where people can count on one another as their individual talent is appreciated and nourished accordingly (see Figure 17).



HE Socialization Context (Figure 17)

In the next section I aim to offer some practical recommendations as well as possible implementation challenges at FUB.

7.2 Recommendations

Currently, the institution is seen by many of its co-workers as a place with a pretentious infrastructure and less as a place with a focus on human capital. Indeed, both the academics and professional managers mentioned how important it would be to give the human capital aspect the prominent focus it should have. This, therefore, leads to make the following practical suggestions:

7.2.a) Some practical suggestions for the Free University of Bozen-Bolzano

In order to start the creation of such a knowledge-enabling 'ba' it is strongly suggested, as stated above, that the management reflects upon the outcome of the findings from this study by aiming to build upon the willingness of their knowledge workers to disseminate a learning culture which takes place through social capital, through an engaged and committed network of co-workers who, together, are the creators of an organizational/intellectual capital (Nahapiet/Ghoshal 1998, van Buren 1999, Swart 2008): the main resource for competitive advantage of an institution.

For this to happen it is suggested that the top management of the institution aims to reach clarity on what the mission of being an intercultural and trilingual context shall be. During the empirical data gathering it was evident that the different participants had differing ideas of what it meant. I would, therefore, suggest that the institution should invest in tacit activities with the aim of coming to a common and shared agreement on what the two terms mean. This will then help to give all institutional staff members a clear compass on which direction to work towards (Charan et al 2014). It may want to see trilingualism as a given competitive niche to start with. The management may also build upon other cross-departmental courses which have developed into a niche such as the inter-disciplinary PhD Programme in Mountain Environment and Agriculture.

The top management should invest more in collegial discussion as the current situation is still perceived as an environment where many decisions are taken at top level without involving key individuals in their discussions. Hence, tacit routines, practices and processes, as mentioned above, are perceived as empowering because, due to a higher level of awareness, it was deemed to be easier to build consensus and to extract meaning from collaborative projects (Dillon 2014).

Furthermore, it is suggested that the institution removes the physical separation of the central administration and academia. This separation is perceived as a huge boundary between all parties and, when speaking with the different participants, everybody expressed that this separation is meaningless and therefore should be broken down.

The senior management within the institution should consider giving staff members the opportunity of job rotation (Davenport & Prusak 2000; Nonaka & Takeuchi 1995), involving staff in trans-disciplinary projects (Swart 2011), implementing systems for appraisal, promotion and, if needed, demotion for internal staff (Reinholt & Pedersen 2011), and recruiting staff members in relation to their competencies, their attitudes and their willingness to collaborate (Matzler 2011) instead of getting tied to bureaucratic routines and practices. Many of the co-workers argued that it would be beneficial to shadow their respective colleagues who execute different roles in order to acquire a 360 degree understanding. They also mentioned the importance of working across departments as, in those cases where it already took place, the outcome was very promising; and from a motivational point of view they realized that, through the dwelling in other fields, their own perspective started to shift (Bennett 2004, Rizk 2014).

The senior management should furthermore create routines and practices like common lunch breaks, coffee breaks, briefings and debriefing sessions, brainstorming sessions, moments for reflection which go beyond the mere professional aspect. This could include exercises such as mindfulness, personal development as well as spontaneous thought-idea productions, open debates, cross-level and interdisciplinary dialogue, workshops led by facilitators who apply mental map strategies by leading the team with the provocative questions which would help the hidden to unfold layer after layer, shadowing opportunities, and, finally, identifying ‘knowledge activists’ who would function as facilitators for tacit knowledge to flow throughout the institution (Whitchurch 2008, Leistner 2010, von Krogh et al 2000, Swart 2010).

In short, the conditions should be based more on face-to-face communication whenever possible and also digitally through a commonly shared institutional software by simplifying the current use of a variety of platforms (Davenport & Prusak 2000), and by establishing meeting rooms for staff to talk, share and become creative - rooms which are open for different ontological levels in order for trans-disciplinary thinking and actions to take place (Davenport & Prusak 2000, Nonaka & Takeuchi 1995).

In addition, top management should embrace failure as an integrating part of innovation by encouraging their staff - especially the key individuals in the different areas - to take risks and to execute their professional as well as their academic enterprise from a perspective of ‘disruptive innovation’ as Clayton Christenson, a Harvard Business School professor, named it by ‘creating a new market by relying on a completely new approach’ (Naim 2014:71). For this to happen, however, FUB needs to perceive itself as ‘a centre of free discussion and action, tolerating and even

encouraging “subversive” thought and activity’ (Thompson 1970:166 in Parker 2014:289) as desired by all co-workers.

More investment should go on the professional and personal development of both academics and professional managers alike, by nurturing even more the development of professional managers who seem to have very rare opportunities to step out of their building for such reasons.

The time factor should certainly be viewed differently. Currently, it seems that all co-workers find themselves constrained by time. Indeed, top management should view time from a qualitative angle instead of putting emphasis on speed and quantity (Vostal 2014). By investing in the process rather than in immediate outcomes the institution may find itself in a strategically advantaged situation in the long run.

Finally, the senior management should look for ways to decrease bureaucracy wherever possible in order to give more space for the above mentioned routines from which both academic and professional co-workers seem to benefit as it eventually will have an impact on their perception of the meaning of their respective roles (Palmer et al 2010, Dillon 2014).

I would argue, therefore, that tacit routines, practices and processes as outlined above should be strategically institutionalized as it would, in the long run, enhance a knowledge-enabling culture based on behavioural patterns which would sustain, what I call, ‘real’ dialogue between the parties (Bertels & Savage 1998). Such dialogue is based on an approach of empathy by being able to imagine oneself to be in the other person’s role/shoes. Such an institutional culture gives academic freedom more space, it gives all knowledge-workers more autonomy and responsibility (Henkel 2000, Newport 2014), and it facilitates cross-boundary conversations with a holistic and consumer-oriented approach (Swart 2011). Through clarity about the institution’s direction as indicated above, knowledge-workers, eventually, gain a sense of pride, of belonging and of commitment based on trust and on a love for what they do (Clarke et al 2012) in order to embrace the challenge of creating new competitive niches as something to look forward to.

In the next section I will concentrate on possible implementation challenges at FUB.

7.2 b) Possible implementation challenges at FUB

One of the main implementation challenges - in general - but also for FUB, is the fact that there is not a common understanding of what tacit knowledge is all about and, consequently, tacit knowledge is not yet seen as, I would argue, the key internal resource for competitive advantage (Ambrosini & Bowman 2010). By not understanding the high value of the VRIN (valuable, rare,

imperfectly imitable and imperfectly substitutable) resource (Ambrosini & Bowman 2009), the management may be distracted by short-sighted goals which are dictated by economic aspects (Naidoo & Jamieson 2007), the political agenda, as FUB is mainly financed by the public sector (see chapter 2), and by bureaucratic procedures which seem to enhance a culture of ‘internal stickiness’ (Ambrosini & Bowman 2010:439) rather than a culture for innovation as outlined in 6.1.2 above.

By not recognizing the tacit knowledge of their co-workers to be the real value of the institution, there is the risk for high quality staff members to get frustrated by the rigidity of the University. By not allowing knowledge to flow freely and by not encouraging transversal exchange with a risk-taking attitude to take place, there is the risk that valuable staff members could be lost over time. Indeed, during the empirical data gathering three out of 10 key people left the setting (mainly in the professional managers’ arena). In addition, while I was working on the refinement of the final chapter of this thesis I was notified about a key academic leaving the institution. The latter was one of the participants who, during the data gathering process, seemed to come from the RBV arena. S/he stated clearly how important it would be for the institution to invest in strategies which would enhance knowledge to flow freely in order that knowledge-workers would feel encouraged to look and operate outside their comfort-zone and their normal context. It appears that the top management does not invest enough in human capital and it seems that there is the perception that people may be easily replaced by new recruits and ‘the departure among senior administration and academic staff’ (Parker 2014:284) is a question of filling the gap with others. The academic manager who is currently in the position of leaving the context invited the institution publicly to show more courage in pursuing, in his words, ‘uncommon and novel pathways’ (through radio and TV announcements).

If human capital is not seen as a rare, difficult to imitate and impossible to replicate source of competitive advantage (Bowman & Ambrosini 1998) there is also the risk that academics and professional managers are seen to be ‘tradable commodities’ (Parker 2014:289) and that may lead the respective co-workers to execute their tasks in a selfish way by pursuing only short-term individual objectives and by seeing oneself disconnected from the institution and, hence, by not establishing a sense of belonging. This may result in an attitude which may be construed as vanity where each individual thinks s/he is more important than others, and the sense of separation will not only be affected from the physical separation, but rather as a mental construct which may nurture the mindset of co-workers accordingly. That may lead to the perception that education ‘is likely to be ... a commercial transaction’ (Naidoo & Jamieson 2007:271) which may, eventually, have an impact on the quality of teaching as good teachers may be replaced by mediocre teachers in the long run or good teachers may lose their enthusiasm over time. There is no doubt that such an

approach will filter through society in the long run and will further cultivate an individualistic society based on power struggles (Parker 2014).

Another implementation challenge lies in the fact that, according to the view of many participants, many decisions are seen to be top-down decisions as mentioned above. Staff seem to feel disempowered and run by bureaucracy and the political agenda. The lack of conversation and the physical separation of the buildings and of certain faculties (which are around 50-90 kilometers distance away from the main campus) lead to frustration due to the lack of clarity, the lack of reciprocal understanding, and the lack of conversation.

Furthermore, the time factor is still dictated by short-term objectives based on bureaucratic routines and the political agenda instead of seeing that the success of the institution lies in the pursuit of the institution's mission through providing both academic and professional managers with the opportunity to invest in common projects based on the institution's core mission (Newport 2012).

The practical recommendations and theoretical contributions above allow me finally to attempt an answer to the question 'How can a knowledge-enabling 'ba' as outlined in chapter 6.3 be made possible?'

7.3 How can a knowledge-enabling 'ba' as outlined in chapter 6.3 be made possible?

It seems that it all starts from an understanding of what tacit knowledge means as an internal resource and, therefore, as such it is tied to the purpose of a HEI. By using the tacit knowledge of both the academics as well as their professional managers, new knowledge may be created within HEIs and this will unfold in new products and services for students with valuable teaching offerings as well as for society with break-through research programmes in fields of territorial, regional and international interest. As such tacit knowledge, I would argue, must be viewed by all stakeholders as the core element for innovation and for collaborative engagement.

A knowledge-enabling 'ba' can be made possible if decision-makers invest in the RBT (resource-based theory) where each co-worker's tacit knowledge is seen to be the most powerful 'simultaneously valuable, rare, imperfectly imitable and imperfectly substitutable'... 'source of competitive advantage' (Ambrosini & Bowman 2010:439). If managers understand the value of this unique, not substitutable power then they should invest time and space for purposeful tacit routines, practices and processes such as brainstorming sessions, informal and formal meetings, the creation of meeting rooms which enhance free discussion and action where there is space for 'subversive' thoughts in order to encourage 'a dynamic renewal' (Parker 2014:289), mental mapping, group

work, focus group discussions, debates, active reflection, shadowing schemes in order to, ultimately, have an impact on the institution's performance (Ambrosini & Bowman 2010). Indeed, managers 'may want to promote knowledge transfer, such as collective discussions, debriefing sessions and performance evaluation processes. By sharing their experiences organizational members can achieve an improved level of understanding' (Ambrosini & Bowman 2010:947) of mechanisms which are involved in specific activities and this seems to have a positive impact on the outcome. As mentioned above, during the focus group 'workshop' and in the interviews which followed the understanding of the respective roles, tasks and activities as well as the desire for collaborative projects increased significantly. Hence, managers should invest in conditions which facilitate cross-role, cross-departmental and trans-disciplinary conversation by identifying coordination individuals such as knowledge-activists who would keep the debate alive (von Krogh et al 2000, Leistner 2010). Such practices should be embedded in the management's strategic decisions because, as mentioned by all participants, for tacit knowledge to flow management must put a further emphasis on the institution's cultural change if they want to retain their staff and if they want to enhance the institution's reputation among stakeholders.

It seems that this journey of discovery on tacit knowledge sharing and its impact on HEIs is about to come to an end by seeing the end unfold in a new beginning. Indeed, according to the findings in this study it is evident that an outlook on a holistic knowledge concept as well as the investment in the socialization quadrant by putting the human capital at the centre of the management's strategic thinking and acting the likeliness for an HEI to be competitive among many other players in the field is exponentially bigger. The next chapter concludes this journey of discovery by looking back at the key concepts of this study: the purpose of HEIs, the importance for tacit knowledge to flow, the value of the socialization quadrant and its impact on the creation of competitive niches, as well as by outlining where further research may be needed.

8. Conclusion

In order to find a satisfactory answer to the RQ it was deemed to be important to unravel the notion of tacit knowledge. According to my thesis' understanding of knowledge I would say that the journey of discovery has not come to an end yet as knowledge is based on the notion of constructivism. This is in alignment with the idea that the journey of discovery is a never-ending process and will accompany a human being for her/his entire life time. In my concrete case, the process of the DBA study has been of vital importance to me as a professional; but more than that it has been crucial for me as a person. By studying, by talking to other professionals in the field and by acquiring a more astute and objective approach for reflection, I have certainly developed a more humble way of viewing personal and collective knowledge. It seems that I am now ready to integrate the notion that, although the absolute knowledge may be seen in moments of emptiness, stillness and moments of insight, human knowledge is obscured by our own human and cultural limitations. Indeed, there is always the tendency to interpret what lies ahead of us instead of just viewing it with a non-judgmental mind. Such an individual and/or collective interpretation of reality, of course, has to be seen, therefore, as a fraction of the knowing.

Based on the theoretical SECI framework (Socialization, Externalization, Combination, Integration) of Nonaka & Takeuchi's work on knowledge-sharing (1995), I came to the conclusion that, although the absolute knowledge may be at a person's reach in moments of intuition and glimpses of insight, and although a person knows more than s/he can tell (Polanyi 1958; Polanyi & Prosch 1976; Polanyi 2009), the knowledge creation process will always remain a process of becoming because out of existing knowledge new knowledge will be created and the process will never come to an end. I seem to agree with both Confucius and Socrates who put it as follows:

'Real knowledge is to know the extent of one's ignorance.' (Confucius)

'To know, is to know that you know nothing. That is the meaning of true knowledge.' (Socrates)

Consequently, I am tempted to say that the more one knows the more one realizes that we do not know. It seems that the goal is never the destination, but rather the process. And, perhaps, the process may be described as follows: If somebody dwells in the process of discovery by believing in the miracle of wisdom, absolute truth or, as I called it in my thesis, absolute knowledge, fascinating moments of discovery may be experienced which then lead to the desire to investigate further in new hidden aspects. Such an understanding puts the emphasis on the process rather than on the product itself and the knowledge-worker might feel inspired by her/his passion to dig deeper - individually and collectively as outlined in my thesis. The realization that there is always more to be discovered and that, in moments of awe, in moments of deep insight, glimpses of the whole may

become clearer, the basis seems to be laid for each person's perception of the important value of the tacit dimension of each single knowledge-worker (Polanyi & Prosch 1976; Tolle 2005). Perhaps, this shall be seen as the core purpose of an HEI, which will be outlined below.

8.1 The purpose of HEIs

We may say that the essence of a higher education institution is its knowledge and, as a consequence, the transfer of existing knowledge and the creation of new knowledge in order to help society move forward (Brewer & Brewer 2010; Palmer et al 2010; Gioia 1996). Therefore, HEIs may want to see themselves as knowledge-oriented institutions where the tacit knowledge of their knowledge-workers has to be valued. According to both the literature and the empirical study, knowledge has to be understood as the most important institutional asset and/or resource (Ambrosini & Bowman 2008/2010; Bowman & Toms 2010; Nonaka & Takeuchi 1995). The top management of HEIs may want to instill this awareness into people's hearts and minds by establishing an environment of knowledge-sharing practices and routines which facilitate the knowledge-sharing process across all ontological levels (Davenport & Prusak 2000). In order for this to happen, HEIs might want to learn from Japanese companies in terms of *shoshin*, the 'oneness', by leaving the separating approach of Western thinking (Naim 2014) and by helping the institution develop 'into a centre of free discussion and action'... 'for a dynamic renewal for the whole society within which it operates' (Thompson 1970:166 in Parker 2014:289). Indeed, the main mission of an HEI lies in both teaching and high quality research 'by producing, transferring and disseminating' (Naidoo & Jamieson 2007:268) knowledge in such a way that the new generation is ready to embrace the challenges of a continuously changing societal environment and that research outcomes may result in a positive impact on local and/or global societal matters (Palmer et al 2010, Achor 2010; Dillon 2014). As mentioned in chapter 4, such an institution may want to see its purpose to have an emphasis on the tacit dimension to emerge - where co-workers and students may feel intrinsically motivated for their work as they experience that their individual contributions are seen to be important, that their tacit competencies are valued and, finally, that what they do is connected to other people's tacit dimension (Newport 2012). In order to facilitate this, the management of the institution may want to integrate the value creation of their respective co-workers in their strategic decisions by acknowledging the importance of human capital which will be further outlined in the next section.

8.2 The importance of human capital

If the main purpose of an HEI lies in good teaching and break-through research which shall move society forward as a whole (Palmer et al 2010), then this automatically implies that the emphasis of top management shall be the recognition of their co-workers' potential by putting human capital first. This entails the establishment of a culture in which both academic and professional co-workers are seen as VRIN resources (Ambrosini & Bowman 2009) which are not easily replaceable. Top management may, therefore, want to apply a theory of value approach by 'addressing value creation through adaptive learning' (Bowman & Toms 2010:5) and thus encouraging co-workers to share their respective knowledge because such human activity may create a situation of competitive advantage (Bowman & Toms 2010). The key aspects of such a knowledge-enabling culture should be based on 'the dynamic capability perspective' which 'extends the resource-based view argument by addressing how valuable, rare, difficult to imitate and imperfectly substitutable resources can be created and how the current stock of valuable resources can be refreshed in changing environments' (Ambrosini & Bowman 2009:29). According to this study, all this starts in simple terms in the socialization quadrant where there is an understanding of the huge value of the tacit dimension of all co-workers and where, through exchanges among the respective co-workers, their respective career capital (Newport 2012) is used accordingly in order to create competitive niches. Indeed, tacit knowledge sharing may be the key asset for an institution to be competitive. This will be outlined below.

8.3 The importance of tacit knowledge sharing

It appears to me that a knowledge organization such as an HEI may therefore see the tacit knowledge sharing aspect as one of its core tasks and should be implemented in its daily routines and practices if it is to be successful in today's competitive market. The personal tacit knowledge of both their professional and academic co-workers may open up new horizons for an institution to connect with the creative source of each of them and, by sharing their ideas and by creating a knowledge-enabling environment, they may create a situation of competitive advantage. In such an environment both academic and professional co-workers may develop more holistic, application-oriented, trans-disciplinary services, programmes and projects in which 'worlds get connected' (Swart 2011:372). This may give rise to a tacit-enabling culture which lies in a process that, in alignment with a variety of scholars (Palmer et al 2010, Achor 2010, Ambrosini & Bowman 2001/2008/2009/2010, Dillon 2014), may be called a process of sense-making where the 'academic capital' (Naidoo & Jamieson 2007:270) lies in intellectual, cultural and societal assets in the long run by giving education its valuable place in society and by responding to societal matters accordingly. Indeed, if tacit knowledge 'walks' around, new ideas may emerge. The 'mixing and

matching' (Newport 2012:224) of tacit knowledge of the respective co-workers is seen to be the 'catalyst for break-through new ideas' (Newport 2012:224) which may then lead to the creation of new competitive niches as outlined in chapter 5.3. This will now take us to the answer to the RQ 'How does tacit knowledge sharing create new competitive niches at HEIs?'

8.4 The creation of competitive niches

Tacit knowledge sharing can create competitive niches if purposeful routines, processes and practices are implemented on a daily basis in the strategic approaches of the institution. By understanding the unique and not substitutable value and power of the tacit dimension of their co-workers, managers will invest in time and space for brainstorming sessions, informal and formal meetings, the creation of meeting rooms which enhance free discussion and action (Parker 2014:289), mental mapping, group work, focus group discussions, debates, active reflection, shadowing schemes and continuous reflection as one of the main missions of the institution (Ambrosini & Bowman 2010). When managers promote such knowledge transfer there has been evidence of the emergence of competitive niches, which have been described in chapter 5.3: services or products which are unique and attractive to promote or sell. Due to their uniqueness it is difficult, as mentioned in the introduction, for such niches to be imitated or replicated as they emerge from VRIN resources outlined above (Bowman & Ambrosini 1998, Ambrosini & Bowman 2009/2010). As such a competitive niche is based on the uniqueness of the product which in itself is based on the co-workers' individual creative work and the use of their tacit knowledge (Pressfield 2002) as well as on the collective engagement of teams, working groups and/or 'communities of practice' (Lave & Wenger 1991, Wenger 1998).

It seems, therefore, that managers may want to invest in conditions which facilitate cross-role, cross-departmental and trans-disciplinary conversations by identifying key individuals such as knowledge-activists who will keep the debate alive (von Krogh et al 2000, Leistner 2010). In alignment with Cal Newport, in the ideal world management should create space and time for co-workers for the following two main aspects in order for tacit knowledge flow to lead to the creation of new competitive niches: 'First you need career capital, which requires patience. Second, you need to be ceaselessly scanning your always-changing view of the adjacent possible in your field, looking for the next big idea. This requires a dedication to brainstorming and exposure to new ideas. Combined, these two commitments describe a lifestyle' (2012:223). Indeed, tacit sharing practices have to be integrated in the institution's culture in order for them to eventually become embedded in the co-workers' work style and mindset (Davenport & Prusak 2000). That is why the creation of

competitive niches will be possible in an institutional environment in which tacit knowledge sharing is embedded in the institution's culture.

In short, the research question 'How does tacit knowledge sharing create new competitive niches?' may be answered in the following way: by establishing a tacit knowledge-enabling environment new competitive niches are implicit outcomes of it. Such an environment is not a given. It requires attention, dedication and, certainly, flexibility as all co-workers are invited to think outside their box and to take risks. This also means that space should be given for contradiction because this is the stepping stone towards the creation of a commonly shared action (Stone 2013). Contradiction is, therefore, a must for an institution's philosophical approach because it encourages and revitalizes the debate: the concept of 'agora' where the chaos of the tacit of all may result in the construction of institutional objectives based on the core mission of the institution.

In the next section I will outline some suggestions for further research.

8.5 Suggestions for further research

By acknowledging the fact that knowledge is a construction concept and dependent on individual as well as on collective components and that the tacit may be the doorway to the hidden which comes to the surface in moments of insight when certain conditions are given, further research should be dedicated to extensive case study analysis by looking for common patterns which may help an institution move forward. Such process-oriented topics can easily be shaken as we have seen from the example of the BSE at Warwick where the appointment of a new dean resulted in a drastic change of the departmental culture (Parker 2014). Therefore, I would advocate that scholars may want to do more case study research by examining unique realities and comparing the results with one another. Patterns may then be found. However, this should be based on the understanding that there are topics which are not operational. The focus should, therefore, be on the sense-making framework by putting more emphasis on the theme of the socialization quadrant in different institutions in order to see 'what the company makes of its insights, how it translates them into new ideas and opportunities, and how it shapes a shared perspective on' (Dillon 2014:76) its institutional mission.

It would be valuable to research, therefore, different realities by finding out what an institution does in order for their co-workers to master their own rare and valuable skills by making them available to the institution (Newport 2012) and to the society in general.

In my specific case study I aim to observe how FUB will use the outcomes of the study and whether, via the integration of the suggested practices, some valid progress in terms of the creation of a knowledge-enabling culture as well as of new competitive niches will be seen.

This takes this thesis to a new beginning.

8.6 Final remarks

I would like to finish this journey with the following final remarks.

The study of this research has further inspired me and further underlined the concept of seeing a human being as a unique remarkable asset, and as such it seems to be paramount to align ourselves with the way we are, with our speciality, with our element, with our uniqueness by appreciating the hidden in ourselves and by understanding the importance of sharing what we know with others.

This acknowledgement of wonder will help us shift from a culture of comparison and judgement to a culture of appreciation of intercultural diversity where each person sees herself/himself be the one important additional piece out of a big art work. Such an awareness may make us be loyal towards ourselves and towards others. This eventually leads us to a perception of satisfaction, gratitude and joy.

I would like to end with the following quote by Eckart Tolle:

‘The joy of Being, which is the only true happiness, cannot come to you through any form, possession, achievement, person, or event - through anything that happens. That joy cannot come to you - ever. It emanates from the formless dimension within you, from consciousness itself and thus is one with who you are.’ (Tolle 2005)

Bibliography

- Achor, Sh., 2010. 'The Happiness Advantage. The Seven Principles that Fuel Success and Performance at Work'. New York: Random House.
- Alvesson, M., 2000. Social Identity and the Problem of Loyalty in Knowledge-Intensive Companies. *Journal of Management Studies*, 37:8, 1101-1123.
- Akehurst, G., Rueda-Aremngot, C., Vivas Lopez, S., Palacios Marqués, D., 2011. Ontological supports of knowledge: knowledge creation and analytical knowledge. *Management Decision*, 49:2, 183-196.
- Ambrosini, V. & Bowman, C., 2001. Tacit Knowledge: Some Suggestions for Operationalization. *Journal of Management Studies*, 38:6, 811-829.
- Ambrosini, V. & Bowman, C., 2008. Surfacing Tacit Sources of Success. *International Small Business Journal*, 26:4, 403-432.
- Ambrosini, V. et al, 2009. Dynamic Capabilities: An exploration of how firms renew their resource base. *British Journal of Management*, 20:1, 9-24.
- Ambrosini, V. & Bowman, C., 2009. What are dynamic capabilities and are they a useful construct in strategic management. *International Journal of Management Reviews*, 11:1, 29-49.
- Atakan, M.G.S., Eker T. 2007. 'Corporate Identity of a Socially Responsible University - A case from the Turkish Higher Education Sector'. *Journal of Business Ethics*, Vol. 76: 1, pp. 55-68.
- Bacon, E., 2009. Do professional managers have a profession?. *Perspectives: Policy and Practice in Higher Education*, 13:1, 11-16.
- Baldwin, J. F. 2009. Current challenges in higher education administration and management. *Perspectives: Policy and Practice in Higher Education*, 13:4, 93-97.
- Baldwin, R. & Chang, D. A. 2007. Collaborating to Learn, Learning to Collaborate. *PeerReview*, 9:4, 26-30.
- Barber et al 2013. An avalanche is coming. Higher Education and the Revolution ahead. Institute for Public Policy Research (IPPR), London.
- Baumard, Ph., 2001. Tacit Knowledge in Organizations. SAGE Publications Ltd., London.
- Bélanger, Ch. H., Syed, S., Mount J., 2007. The Make Up of Institutional Branding: Who, What, How?'. *Tertiary Education and Management*, 13:3, 169-185.
- Bennett, M. J., 2004. Becoming Interculturally Competent. In Wurzel, J. (Ed.) 2004. Toward multiculturalism: A reader in multicultural education, Newton, MA: Intercultural Resource Corporation, 62-77.
- Berg, B., 2007. Qualitative Research Methods for the Social Sciences. Pearson International Edition, Boston.

- Bertels, Th., Savage, Ch.M., 1998. Understanding Knowledge in Organizations. In: von Krogh, G., Roos, J., Managing Knowledge, Perspectives on cooperation and competition. SAGE Publications Ltd, London
- Bignold, W., 2012. The ethics of research practice: Truth through honesty. In: Su F. & McGettrick B., Professional Ethics. Education for a Humane Society. Cambridge Scholars Publishing, Newcastle upon Tyne.
- Bohen, Sh. J. & Stiles, J. 1998. Experimenting with Models of Faculty Collaboration: Factors that Promote Their Success. *New Directions for Institutional Research*, 100, 39-55.
- Bourdieu, P., 1977. Outline of a Theory of Practice. Cambridge University Press, Cambridge.
- Bourdieu, P., 1998. Practical Reason. Polity Press, Cambridge.
- Bourdieu, P., Passeron J.C., 2011. Reproduction in Education, Society and Culture. Second Edition. Sage Publication, London.
- Bowman, C. & Ambrosini, V., 2003. What does value mean and how is it created, maintained and destroyed? Academy of Management Annual Meeting, Seattle, 1-34.
- Bowman, C. & Ambrosini, V., 2007. Firm value creation and levels of strategy. *Management Decision*, 45:3, 360-371.
- Bowman, C. & Swart, J., 2007. Whose Human Capital? The Challenge of Value Capture When Capital is Embedded. *Journal of Management Studies*, 44, 488-505.
- Bowman, C. & Toms, St., 2010. Accounting for competitive advantage: The resource-based view of the firm and the labour theory of value. Accepted Manuscript, White Rose research papers, 1-38.
- Brewer, P.D. & Brewer, K.L., 2010. Knowledge Management, Human Resource Management, and Higher Education: A Theoretical Model. *Journal of Education for Business*, 85, 330-335.
- Brohm, R., 2006. The emancipatory power of the tacit dimension. *Critical Perspectives on International Business*, 2:3, 244-256.
- Bryman, A., 2006. Integrating quantitative and qualitative research: how is it done?. *Qualitative Research*, 6:97, 96-113.
- Bryman, A., 2012. Social research methods, 4th edition. Oxford University Press, New York.
- Byrne, D. & Ragin Ch., 2009. The SAGE Handbook of Case-Based Methods. SAGE Publications Ltd, London.
- Byrne, D., 2011. Applying Social Science. The role of social research in politics, policy and practice. The Policy Press, Bristol.
- Capra, F., 1984. Das Tao der Physik. Die Konvergenz von westlicher Wissenschaft und oestlicher Philosophie. Scherz Verlag, Bern, Muenchen, Wien.

- Charan, R. et al, 2014. Politicians for Prosperity. *Strategy and Business*, 77:4, 6-8.
- Christensen, C.M., 2006. The Ongoing Process of Building a Theory of Disruption. *The Journal of Product Innovation Management*, 23, 39-55.
- Chua, A.Y.K., 2005. The design and implementation of a simulation game for teaching knowledge management. *Journal of the American Society for Information Science & Technology*, 56, 1207-1216.
- Clarke, C., Knights D., Jarvis, C., 2012. A Labour of Love? Academics in Business Schools. *Scandinavian Journal of Management*, 28, 5-15.
- Collier, D. & Gerring, J., 2009. Concepts and Method in Social Science. The Tradition of Giovanni Sartori. Routledge, Abingdon.
- Cosier, R., 2010. The Economic Meltdown and the Future of Business Schools. Global Foundation for Management Education. Emerald, 12-13.
- Csikszentimihalyi, M., 2004. Flow. Das Geheimnis des Glücks. Klett-Cotta, Stuttgart.
- Dalai Lama, 2005. The Universe in a Single Atom. The convergence of Science and Spirituality. Random House, Inc., New York.
- D'Ambrosio, M. B. & Ehrenberg, R. G. 2007. Transformational Change in Higher Education. Positioning Colleges and Universities for Future Success. Cheltenham: Edward Elgar Publishing Limited.
- Davies, J. L. 1991. New Universities: their origins and strategic development. In Altbach, Ph. G. (Ed) *International Higher Education: an Encyclopedia*. Garland Publishing Co., 205-231.
- Dhanaraj, Ch., Lyles, M., Steensma, H.K., Tihany, L., 2004. Managing tacit and explicit knowledge transfer in IJVs: the role of relational embeddedness and the impact on performance. *Journal of International Business Studies*, 35, 428-442.
- Davenport, Th. H. & Prusak, L., 2000. Working Knowledge. How organizations manage what they know. Harvard Business School Press, Boston.
- Davies, J. L., 1991. New Universities: their origins and strategic development in Altbach Ph. G. (Ed). *International Higher Education: an Encyclopedia*. Garland Publishing Co., 205-231.
- Denning, S., 2013. What is Knowledge. www.stevedenning.com/Knowledge-Management/what-is_knowledge.aspx.
- De Onzonol, S., 2010. Management Education. The Best is Yet To Come. Global Foundation for Management Education. Emerald, 18-22.
- Dillon, K., 2014. The Human Factor. *Strategy and Business*, 77:4, 73-77.
- Duguid, P., 2005. 'The Art of Knowing': Social and Tacit Dimensions of Knowledge and the Limits of the Community of Practice. *The information society*, 21, 109-118.

- Duke, Ch. (2002). 'Managing the Learning University'. Maidenhead: SRHE and Open University Press, pp. 14-33.
- Du Sautoy, M. 2014. It's not about the numbers. The magazine of the International Baccalaureate, September 2014, Issue 70:11-13.
- Elkin, G., Devjee F., Farnsworth, J., 2005. Visualising the "internationalisation" of universities. *International Journal of Educational Management*, 19:4, 318-329.
- Eisenhardt, K.M., 1989. Building Theories from Case Study Research. *The Academy of Management Review*, 14:4, 532-550.
- Favaro, K., 2014. To the Nimble Go the Spoils. *Strategy and Business*, 77:4, 64-68.
- Feynman, R.P., 1988. What do you care what other people think? Further adventures of a curious character. Penguin Books Ltd., London.
- Flyvbjerg, B., 2006. Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12, 219-244.
- Frankl, V. E., 2002.trotzdem Ja zum Leben sagen. Ein Psychologe erlebt das Konzentrationslager. Deutscher Taschenbuch Verlag GmbH, Muenchen.
- Fromm, E., 1982. L'arte d'amare. Il Saggiatore, Milano.
- Gallo, C., 2010. The innovation Secrets of Steve Jobs. Insanely different. Principles for Break through Success. Mc Graw Hill, New York.
- Gauntlett, D. & Holzwarth, P., 2006. Creative and visual methods for exploring identities. *Visual Studies*, 21:01, 82-91.
- Giddens, A., 1991. Modernity and Self-Identity. Self and Society in the Late Modern Age. Stanford University Press, Stanford.
- Gioia, D. A. & Thomas J.B. 1996. Identity, Image and Issue Interpretation: Sensemaking during Strategic Change in Academia. *370 Administrative Science Quarterly*, 41, 370-403.
- Gladwell, M., 2008. Outliers: The Story of Success. Penguin Books, London.
- Gleick, J., 1992. Richard Feynman and modern physics. Little, Brown and Company, London.
- Glisby, M., Holden N. J., 2011. Mastering Tacit Corridors for Competitive Advantage: Cross-Cultural Knowledge Creation and Sharing at Four International Firms. *Global Business and Organizational Excellence*, 64-77.
- Goleman, D., 2007. Social Intelligence. The new Science of Human Relationships. Hutchinson, London.
- Goleman, D., Kaufman, P., Ray, M., 2004. Lo spirito creativo. BUR Saggi, Milano.
- Greer, S., 1978. On the selection of problems. In: Bynner, J. & Stribley, K.M., Social research: principles and procedures. The Open University, New York.

- Guillemin, M. & Drew, S., 2010. Questions of process in participant-generated visual methodologies, *Visual Studies*, 25:2, 175-188.
- Hannan, A. & Silver, H. 2000. *Innovation in Higher Education. Teaching, Learning and Institutional Cultures*. Open University Press, Buckingham.
- Heizmann, H., 2011. Knowledge sharing in a dispersed network of HR practice: Zooming in on power/knowledge struggles. *Management Learning*, 42, 379-393.
- Henkel, M. 2000. *Academic identities and Policy Change in Higher Education*. Jessica Kingsley Publishers Ltd., London.
- Henkel, M. 2005. Academic identity and autonomy in a changing policy environment. *Higher Education*, 49:1/2, 155-176.
- Hill L., Kim S. L., Lagueux R. 2007. Faculty Collaboration as Faculty Development. *PeerReview*, 9:4, 17-19.
- Huemer, L., von Krogh, G., Roos, J., 1998. Knowledge and the Concept of Trust. In: von Krogh, G., Roos, J., *Managing Knowledge, Perspectives on cooperation and competition*. SAGE Publications Ltd, London.
- Huisman J., Maasen P., Neave Guy, 2001. *Higher Education and The Nation State. The International Dimension of Higher Education*. Pergamon.
- Hurst, D., 2014. Greasing the Skids of Invention. *Strategy and Business*, 77:4, 82-85.
- Huser, J., 2001. *Lichtblick fuer helle Koepfe*. Lehrmittelverlag des Kantons Zuerich, Zuerich.
- Jackson, S., 2011. Organizational culture and information systems adoption: A three-perspective approach. *Information & Organization*, 21, 57-83.
- Jaruzelski, B., et al, 2014. Proven Paths to Innovation Success. *Strategy and Business*, 77:4, 35-49.
- Jongbloed B., 2004. Regulation and Competition in Higher Education. In: Teixeira P., Jongbloed B., Dill D., Amaral A. *Markets in Higher Education: Rhetoric or Reality*. Springer-Verlag, New York, 87-111.
- Kant, I., 1982. *Kritik der reinen Vernunft*. Reclam, Ditzingen.
- Kezar, A. & Eckel, P. (2002). Examining the Institutional Transformation Process: The Importance of Sensemaking, Interrelated Strategies, and Balance. *Research in Higher Education*, 43/3, 295-328.
- Kinnie, N. & Swart, J., 2012. Committed to whom? Professional knowledge worker commitment in cross-boundary organisations. *Human Resource Management Journal*, 22, 21-38.
- Koffman F., Senge, P., 2003. *Communities of Commitment. The Heart of Learning Organizations*. Axialent. Integral Evolution, 1-33.

- Kotler Ph., Kartajaya H., Setiawan I. (2010), 'Marketing 3.0. From Products to Customers to the Human Spirit'. Hoboken/New Jersey: John Wiley & Sons.
- Kozminski, A., 2010. The New Revolution in Management Education? Global Foundation for Management Education. Emerald, 14-17.
- Kramer, M.W. & Crespy, D.A. 2011. Communicating collaborative leadership. *Leadership Quarterly*, 22, 1024-1037.
- Ladkin, D. & Taylor, S.S. 2010. Enacting the 'true self': Towards a theory of embodied authentic leadership. *Leadership Quarterly*, 21, 64-74.
- Latham, G.P., Saari, L.M., Pursell, E.D., Campion, M.A., 1980. The Situational Interview. *Journal of Applied Psychology*, 65:4, 422-427.
- Lave, J., Wenger, E., 1991. Situated learning. Legitimate peripheral participation. Cambridge University Press, New York.
- Leana, C.R., van Buren, H.J., 1999. Organizational Social Capital and Employment Practices. *Academy of Management Review*, 24:3, 538-555.
- Lee, J.J., 2007. The shaping of the departmental culture: Measuring the relative influences of the institution and discipline. *Journal of Higher Education Policy & Management*, 29, 41-55.
- Leistner, F., 2010. Mastering Organizational Knowledge Flow. How to make knowledge sharing work. Hoboken/New Jersey: SAS Institute.
- Leonard, N., Insch G.S., 2005. Tacit Knowledge in Academia: A Proposed Model and Measurement Scale. *The Journal of Psychology*, 139:6, 495-512.
- Lipton, B.H., 2008. The Biology of Belief. Unleashing the Power of Consciousness, Matter & Miracles. Hay House, Inc., Carlsbad/California.
- Longworth, L.M. 2010. Leadership in the Virtual Higher Education Environment: Towards an Appropriate Model and Framework. Thesis for the Degree of Doctorate in Business Administration in Higher Education at University of Bath, School of Management.
- Luijten-Lub A., Van der Wende M., Huisman J., 2005. On Cooperation and Competition: A Comparative Analysis of National Policies for Internationalisation of Higher Education in Seven Western European Countries. *Journal of Studies in International Education*, 147-163.
- Matzler, K., Renzl, B., Mooradian, T., von Krogh, G. & Mueller, J., 2011. Personality traits, affective commitment, documentation of knowledge, and knowledge sharing. *International Journal of Human Resource Management*, 22, 296-310.
- McEvan, E.K., McEwan, P.J., 2003. Making Sense of Research. What's Good, What's Not, and How to Tell the Difference. Corwin Press, Thousand Oaks.
- McInnis, C. 1998. Academics and professional administrators in Australian universities: Dissolving boundaries and new tensions[1]. *Journal of Higher Education Policy & Management*, 20, 161.

- McNay, I., 1995. From the collegial Academy to Corporate Enterprise: The Changing Cultures of Universities in: Schuller, T. 1995. *The Changing University?*. Society for Research into HE & Open University Press, 105-115.
- Masiki, T., 2011. Academic Visual Identity (AVI): An act of symbolic leadership. *Journal of Marketing for Higher Education*, 21:1, 85-105.
- Melewar T.C., Akel S., 2005, 'The role of corporate identity in the higher education sector. A case study'. *Corporate Communications. An International Journal*, Vol. 10: 1, pp. 41-57.
- Menguc, B., Auh, S. & Chan Kim, Y., 2011. Salespeople's Knowledge-Sharing Behaviors with Coworkers Outside the Sales Unit. *Journal of Personal Selling & Sales Management*, 31, 103-122.
- Meyer, H., 2000. *Die eigene Identität. Wie man sie findet und erfolgreich verwirklicht*. Trigon Verlag, Muenchen.
- Mintzberg, H., Ahlstrand, B., Lampel, J., 1998. *Strategy Safari. A guided tour through the wilds of strategic management*. Free Press, New York.
- Nahapiet, J., 1998. Social Capital, Intellectual Capital and the Organizational Advantage. *Academy of Management Review*, 23:2, 242-266.
- Naidoo, R. & Jamieson, I., 2005. Empowering participants or corroding learning? Towards a research agenda on the impact of student consumerism in higher education. *Journal of Education Policy*, 20:3, 267-281.
- Naim, M., 2014. *The End of power. From boardrooms to battlefields and churches to states, why big in charge isn't what it used to be*. Basic Books, New York.
- Newport, C., 2012. *So Good They Can't Ignore You. Why Skills Trump Passion in the Quest for Work you Love*. Grand Central Publishing, New York.
- Nixon, J., 1996. Professional identity and the restructuring of higher education. *Studies in Higher Education*, 21:1, 5-16.
- Nixon, J., 2012. The Ethics of Academic Practice: Grasping what Ethics is. In: Su F. & McGettrick B., *Professional Ethics. Education for a Humane Society*. Cambridge Scholars Publishing, Newcastle upon Tyne.
- Nonaka, I., Takeuchi, H., 1995. *The Knowledge-Creating Company. How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.
- O'Donohue, J., 1997. *Anam Cara. Spiritual Wisdom from the Celtic World*. Bantam Books, London.
- O'Toole, J., 2014. The Nothing That's Everything. *Strategy and Business*, 77:4, 78-81.
- Oztok, M., 2012. Tacit knowledge in online learning: community, identity, and social capital. *Technology, Pedagogy and Education*, 22:1, 21-36.

- Palmer, P.J., Zajonc A., Scribner M., 2010. *The Heart of Higher Education. A Call to Renewal. Transforming the Academy through Collegial Conversations.* San Francisco. Jossey-Bass.
- Parker, M., 2014. University, Ltd: Changing a business school. *Organization*, 21:2, 281-292.
- Pasher, E., Ronen, T., 2011. *Knowledge Management. A strategic plan to leverage your company's intellectual capital.* John Wiley & Sons, Hoboken/New Jersey.
- Patry, M., 2010. Business Education and the Current Economic Crisis. An Institutional Perspective. *Global Foundation for Management Education. Emerald*, 7-11.
- Pauwels, L., 2008. An integrated model for conceptualising visual competence in scientific research and communication. *Visual Studies*, 23:2, 147-161.
- Pei Lee, T.E.H. & Chen-Chen, Y., 2011. Knowledge Sharing in is Personnel: Organizational Behavior's Perspective. *Journal of Computer Information Systems*, 51, 11-21.
- Pilbeam, C., 2009. Institutional Structures: Where Legitimacy and Efficiency Meet. In Tight, M., Huisman J., Morpheu, Ch. C. *The Routledge International Handbook of Higher Education*, Chapter 25.
- Polanyi, M., 1958. *The study of Man.* The University of Chicago Press Ltd., London.
- Polanyi, M. & Prosch, H., 1976. *Meaning.* The University of Chicago Press Ltd., London.
- Polanyi, M., 2009. *The tacit dimension; with a new foreword by Amartya Sen.* The University of Chicago Press, Ltd, London.
- Popper, K.P., 1978. The unity of method. In: Bynner, J. & Stribley, K.M., *Social research: principles and procedures.* The Open University, New York.
- Porter, M. E., 1998. *Competitive Advantage. Creating and Sustaining Superior Performance.* Free Press, New York.
- Pressfield, St., 2002. *The War of Art. Break Through the Blocks and Win Your Inner Creative Battles.* Black Irish Entertainment LLC, New York.
- Rafferty, J., 2013. That thing that you do. *Training Journal*, 28-32.
- Reichert, S., 2006. *The rise of knowledge regions: Emerging opportunities and challenges for universities.* EUA Publications, Brussels.
- Reinholt, M.I.A., Pedersen, T. & Foss, N.J., 2011. Why a central network position isn't enough: The role of motivation and ability for knowledge sharing in employee networks. *Academy of Management Journal*, 54, 1277-1297.
- Remus, U., 2012. Exploring the Dynamics behind Knowledge Management Challenges – An Enterprise Resource Planning Case Study. *Information Systems Management*, 29:3, 188-200.
- Rizk, Ch., 2014. Erin Meyer Can Make your Global Team Work. *Strategy and Business*, 77:4, 11-13.

- Robinson K., 2009. *The Element. How Finding Your Passion Changes Everything*. London: Penguin.
- Rubin, H.J. & Rubin, I.S., 2005. *Qualitative Interviewing. The Art of Hearing Data*. Sage Publications, Inc., Thousand Oaks.
- Rynes, S.L., Bartunek, J. M. & Daft, R. L., 2001. Across the Great Divide: Knowledge Creation and Transfer between Practitioners and Academics. *Academy of Management Journal*, 44: 2, 340-355.
- Sanchez, R., 2005. 'Tacit Knowledge' versus 'Explicit Knowledge'. *Approaches to Knowledge Management Practice*. In Rooney, D., Hearn, G. & Ninan, A. (editors).
- Schwanitz, D., 2002. *Bildung. Alles, was man wissen muss*. Goldmann Verlag, Muenchen.
- Selinger, E., 2013. Tacit knowledge: new theories and practices. *Phenom Cogn Sci*, 12, 247-249.
- Senge et al, 1999. *The Dance of Change: The Challenges to Sustaining Momentum in Learning Organizations*. *Performance Improvement*, 38:5, 55-58.
- Shamsie, J., Mannor, M. J., 2013. Looking Inside the Dream Team: Probing Into the Contributions of Tacit Knowledge as an Organizational Resource. *Organization Science*, 24:2, 513-529.
- Shattock, M., 2003. *Managing Successful Universities*. Open University Press. Maidenhead.
- Slater, St. F., Narver, J.C., 1995. Market Orientation and the Learning Organization. *Journal of Marketing*, 59:3, 63-74.
- Sorcinelli, M. D., 2007. Faculty Development. The Challenge Going Forward. *PeerReview*, 9:4, 4-8.
- Sternberg, R.J., 1997. *Erfolgsintelligenz. Warum wir mehr brauchen als EQ und IQ*. Lichtenberg, Muenchen.
- Steup, M., 2013. Epistemology. *The Stanford Encyclopedia of Philosophy* (Winter 2013 Edition), Edward N. Zalta (ed.), forthcoming URL = <http://plato.stanford.edu/archives/win2013/entries/epistemology/>
- Stone, D. A., 2013. The experience of the tacit in multi- and interdisciplinary collaboration. *Phenom Cogn Sci*, 12, 289-308.
- Su, F. & McGettrick, B., 2012. *Professional Ethics. Education for a Humane Society*. Cambridge Scholars Publishing, Newcastle upon Tyne.
- Subashini, R., 2010. Tacit Knowledge – The Ultimate Essence of an Organization. *Advances in Management*, 3:8, 36-39.
- Schwanitz, D., 2002. *Bildung. Alles was man wissen muss*. Wilhelm Goldmann Verlag, Muenchen.
- Swart, J., 2000. *Self-awareness and Collective tacit knowledge and: an exploratory approach*. Doctorate dissertation. University of Bath.

- Swart, J., Pye, A., 2002. Conceptualizing organizational knowledge as collective tacit knowledge: A model of description. Third European Conference on Knowledge, Learning and Capabilities. Athens.
- Swart, J., 2006. Intellectual capital: disentangling an enigmatic concept. *Journal of Intellectual Capital*, 7:2, 136-159.
- Swart, J., 2008. HRM and knowledge workers. In: Wright, P., Purcell, J., Boxall, P. The Oxford Handbook of Human Resources Management. Oxford University Press, Oxford.
- Swart, J., 2011. That's why it matters: How knowing creates value. *Management Learning*, 42, 319-332.
- Swart, J. & Kinnie, N., 2010. Organisational learning, knowledge assets and HR practices in professional service firms. *Human Resource Management Journal*, 20, 64-79.
- Swart, J., van den Hooff, B. & van Baalen, P., 2011. Connecting Worlds. *Management Learning*, 42, 371-377.
- Thomas, H., 2010. Impactful Management Research: The Importance of Finding the Voice of Practice in Management Research. Global Foundation for Management Education. Emerald, 4-6.
- Ting, S.L., Wang, W.M., Tse, Y.K. & Ip, W.H., 2011. Knowledge elicitation approach in enhancing tacit knowledge sharing. *Industrial Management & Data Systems*, 111, 1039-1064.
- Titi Amayah, A., 2011. Knowledge Sharing, Personality Traits and Diversity: A Literature Review. Presented at the Midwest Research to Practice Conference in Adult, Continuing, and Community Education. Lindenwood University. St. Louis, MO.
- Tolle, E., 2005. A New Earth. Awakening to your life's purpose. Penguin, USA.
- Turner, J. H., 1988. A Theory of Social Interaction. Stanford University Press, Stanford.
- Turner, R. C. & Hamilton Sh. J., 2007. Faculty Work in a Changing World. *PeerReview*, 9:4, 14-16.
- Välismaa, J., 1998. Culture and identity in higher education research. *Higher Education*, 36:2, 119-138.
- Van de Lagemaat, R., 2008. Theory of Knowledge for the IB Diploma. Cambridge University Press. Cambridge.
- Van Schaik, G., 2010. An Outcry for 'Change'. Global Foundation for Management Education. Emerald, 27-30.
- Vince, R. & Warren, S., 2012. Participatory Visual Methods. In: Cassell, C. & Symon, G. Qualitative Organizational Research: Core Methods and Current Challenges. Sage, London.

- Von Krogh, G., Ichijo, K., Nonaka I., 2000. Enabling Knowledge Creation. How to unlock the mystery of tacit knowledge and release the power of innovation. Oxford University Press, New York.
- Von Wright, G.H., 1978. Two traditions. In: Bynner, J. & Stribley, K.M., Social research: principles and procedures. The Open University, New York.
- Vostal, F., 2014. Academic life in the fast lane: The experience of time and speed in British academia. *Time & Society*, <http://tas.sagepub.com>_
- Wallace, W., 1978. An overview of elements in the scientific process. In: Bynner, J. & Stribley, K.M., Social research: principles and procedures. The Open University, New York.
- Warren, S., 2009. Visual methods in organizational research. In: Bryman, A. & Buchanan, D., *Handbook of Organizational Research Methods*. Sage, London, 566-582.
- Washington, M., 2008. Markets from culture: Institutional logics and organizational decisions in higher education publishing. *Organization Studies* (01708406), 29, 638-641.
- Watson, D., 2000. Managing Universities and Colleges. Guides to good practice. Managing strategy. Open University Press, Baltimore.
- Watzlawick, P., 2002. Vom Schlechten des Guten oder Hekates Loesungen. Piper Verlag GmbH, Muenchen.
- Weber, M., 1992. The Protestant Ethic and the Spirit of Capitalism. Routledge Classics, New York.
- Weir, D., 2012. The Ethos of Business Practice: A universal ethical basis for the practice of business management. In: Su F. & McGettrick B., Professional Ethics. Education for a Humane Society. Cambridge Scholars Publishing, Newcastle upon Tyne.
- Wenger, E., 1998. Communities of Practice. Learning, Meaning and Identity. Cambridge University Press, New York.
- Whitchurch, C., 2004. Administrative managers - a critical link. *Higher Education Quarterly*, 58:4, 280-298.
- Whitchurch, C., 2006. Who do they think they are? The changing identities of professional administrators and managers in uk higher education. *Journal of Higher Education Policy & Management*, 28, 159-171.
- Whitchurch, C., 2008. Beyond administration and management: Reconstructing the identities of professional staff in UK higher education. *Journal of Higher Education Policy & Management*, 30, 375-386.
- Whitchurch, C., 2008. Professional Managers in UK Higher Education: Preparing for Complex Futures. Final Report. Leadership Foundation for Higher Education, London.
- Winer, M & Ray, K., 1994. Collaboration Handbook. Creating, Sustaining and Enjoying the Journey. Amherst H. Wilder Foundation, St. Paul, MN.

Yeuk-Mui May, T., Korczynski, M., Frenkel, St., 2002. Organizational and Occupational Commitment: Knowledge Workers in Large Corporations. *Journal of Management Studies*, 39:6, 775-801..

Yin, R.K., 1981. The Case Study Crisis: Some Answers. *Administrative Science Quarterly*, 26:1, 58-65.

Yin, R.K., 2009. Case Study Research. Design and Methods. Fourth Edition. Sage Publications, Inc., Thousand Oaks.

Documents

International School of Europe. Information for Parents/Informazioni per Genitori. 2012. Milan.

Ordinary supplement to the 'Official Gazette' no. 122 of 27 May 2010 – General series.

Piano Triennale 2014-2016. Giugno 2013. FUB (Freie Universitaet Bozen). Bozen.
Primary Years Programme. Making the PYP happen: A curriculum framework for international primary education. 2009. International Baccalaureate Organization, Cardiff.

Statuto Libera Università di Bolzano/Statut Freie Universitaet Bozen/Statute Free University of Bozen-Bolzano – emanato con Decreto del Presidente del Consiglio dell'Università n. 48 del 31-10.2013; Pubblicato sulla Gazzetta Ufficiale n. 276 del 25.11.2013.

Audio

Williams, U. 2010. The walk from 'no' to 'yes'. TED talk.
http://www.youtube.com/watch?v=Hc6yi_FtoNo_

Websites

<http://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/28335>

<http://www.stol.it/Artikel/Chronik-im-Ueberblick/Lokal/Reorganizationsorganizationsphase-fuer-Uni-Bozen-Generaldirektorin-geht>

<http://www.youtube.com/watch?v=-L7y1M5Dg1o>

<http://www.fraunhofer.de/en/about-fraunhofer.html>

<http://www.stevedenning.com/Knowledge-Management/what-is-knowledge.aspx>

<http://www.ibo.org/en/about-the-ib/mission/>

<http://www.timeshighereducation.co.uk/features/caltech-secrets-of-the-worlds-number-one-university/5/2011008.article>**Caltech: secrets of the world's number one university**

<http://www.zeit.de/2014/10/christophe-barraud-konjunktur-usa/seite-1>

<http://www.oxforddictionaries.com/definition/english/data>

<http://www.alchemylab.com/ka.htm>

http://anvur-miur.cineca.it/sites/anvur-miur/files/codice_etico_anvur.pdf

<http://anvur-miur.cineca.it/?q=it/homepage>

<http://www.unibz.it/en/public/press/pr/ViewIWPBlob.customHandler?NewsID=83490&language=en>

<https://www.unibz.it/en/organisation/organisation/bodies/council/default.html>

<http://www.unibz.it/en/sciencetechnology/welcome/default.html>

<http://www.unibz.it/en/education/welcome/profile/default.html>

<http://www.unibz.it/en/design-art/progs/default.html>

<http://www.unibz.it/en/design-art/welcome/about/default.html>

<http://www.unibz.it/en/economics/welcome/default.html>

<http://www.unibz.it/en/inf/progs/default.html>

<http://www.unibz.it/en/sciencetechnology/welcome/default.html>

<http://www.discoversociety.org/2014/06/03/the-slow-university-work-time-and-well-being/>

<http://www.economist.com/news/business/21621778-business-leaders-would-benefit-studying-great-writers-philosopher-kings?fsrc=scn/tw/te/pe/ed/philosopherkings>

<http://franzmagazine.com/2014/01/22/startups-energy-passion-networks-pekka-abrahamsson-entrepreneurship-evening-2014/>

https://www.unibz.it/en/sciencetechnology/progs/master/environmental_management/default.html

<https://www.unibz.it/en/design-art/progs/glocaldesign/default.html>

Appendix I

Interview quotes in original language

1) Siamo molto ingessati in un all'interno del nostro sapere che in qualche maniera - almeno in Italia - che sta dentro, molto spesso, con una cornice che è stata creata anche un po' per separare le diverse competenze e dove anche dire che molto spesso chi poi ama spaziare il concetto dell'università è anche spesso guardato con diffidenza. Solo quando una persona raggiunge una certa indipendenza, anche il massimo della sua carriera, è più facile che il suo background possa spaziare. Bisogna essere meno gelosi di quello che è il nostro ambito di conoscenza che in qualche modo è codificato e dobbiamo essere molto più aperti nei confronti di altri che possono sapere più di noi perché ne hanno il background.

2) Das Wissen kann nicht kodifiziert werden, weil jeder in seinem Kontext lebt. Ich bin ein Verfechter dessen, dass jeder alles lernen kann, wenn ich die richtige Motivation habe. Meiner Meinung nach funktioniert der Konstruktivismus so gut, weil der Professor selbst zum Lernenden wird. D.h. er gibt nicht nur Frontalunterricht. Er gibt eine Basis vor, dann kommt der kreative Prozess; alle wachsen, dann ist die Kommunikation wieder im Netzwerk und dann ist der Professor ein Teil der Lerngruppe, wo er die partikuläre Funktion eines Coaches hat in diesem Moment. Es geht um Kommunikation und um Achtung und Beachtung.

3) Bisogna ragionare oltre questo foglio; oltre l'oggi; cercare di ipotizzare il futuro; di non fermarsi su quello che c'è scritto qua; di fare un passetto in più; non pensare al tuo piccolo. Certe volte mi scontro con gli uffici perché sono rinchiusi nel loro microcosmo. Pianificare e progettare vuol dire di non dimenticarsi di nessuno nelle componenti della nostra attività.

4) Tutto quello che ciascuno si porta dietro nel ruolo che poi ricopre ovviamente arricchisce l'istituzione o il lavoro che andrà a fare... ci deve essere scambio che secondo me vuol dire sia scambi organizzati e quindi riunioni o momenti di scambio istituzionalizzato, ma soprattutto uno scambio più spontaneo. Io credo che ogni persona abbia una parte che è il suo ruolo all'interno del mondo del lavoro e una parte che, invece, riguarda la persona. Ed è proprio quest'area di intersezione che va esplorata. E credo che per l'organizzazione sia utile esplorare quest'area e per le persone sia molto utile essere consapevoli di questa distinzione. Diciamo l'equilibrio delle persone. Acquisizione del sapere tacito è un aspetto molto personale che ha un impatto sull'organizzazione. Non si ferma al personale, cioè, credo che poi, abbiamo degli effetti globali all'interno dell'organizzazione. Non mi sentirei di dire che deve cambiare l'organizzazione, è l'altra persona che deve cambiare in una certa maniera; se non comincio io da qualche parte non succederà mai niente.

5) Die Person kann nicht ersetzt werden. Wir Kreativen haben eine eigene Handschrift im Thema der Gestaltung und somit sind wir sehr stark geprägt von dem. Als Gestalter ist die persönliche Note extrem wichtig. Als Designer bin ich mir sicher, dass man sich viel einbringt und Wissen vermittelt, weil man wie ein Seismograph durch die Welt geht und die ganzen Stimmigkeiten und Unstimmigkeiten spürt und versucht. Die eigene Sichtweise wird eingebracht. Wissen basiert immer auf Erfahrung, auf Erprobungen, auf Experimenten und Ergebnissen davon und wird angereichert durch einen Austausch dieser Erfahrungen unter den Gleichgesinnten oder nicht Gleichgesinnten. Weil mein Wissen ist sicher eine Summe von vielen Notionen von vielen Erfahrungen, aber es basiert sich auf einer Haltung wie ich damit umgehe, auf gewissen Interessen. Man muss sich auf gleicher Augenhöhe einstellen.

6) Ich glaube, dass Wissen von Disziplin zu Disziplin verschieden ist. Im deutschen Sprachraum unterscheidet man das Wissen und das Koennen, und da sind die Grenzen auch fließend, was ist Wissen und was ist Koennen. Ich glaube, es gibt soziale Kompetenzen und Persönlichkeitskompetenzen. Erstens mal muss wirklich die richtig verstandene Freiheit da sein und dann in einem transparenten offen gelegten Dialog, wo alles offen gelegt wird - die Offenlegung von Produkten, was ich bin und was ich mache - ich kann es ja selber offen legen, was ich bin und was ich mache. Meines ist ein Wissen mit starker Betonung des Koennens. Ueber das Koennen will ich die Begeisterung wecken. Es geht um den Transfer von Leidenschaft und Sinnhaftigkeit. Es ist notwendig, dass man sich weiterbildet, um zu verstehen, wie man das Wissen an einen anderen weitervermitteln kann. Es hat etwas mit dem Zwischenmenschlichen zu tun.

7) I chiaro che ci vuole principalmente un livello di comprensione: Quindi, la compenetrazione è ovvio che deve esaurirsi innanzitutto sul piano della comprensione, chi sta da una parte deve capire competenze e ruoli di chi sta dall'altra e viceversa. In effetti, siamo un'azienda che produce conoscenza, produce capitale intellettuale; sapere istituzionale e, quindi, ogni collaboratore dovrebbe essere fornito di una mentalità 'third space' con la consapevolezza dell'esistenza del sapere tacito/individuale/intuitivo/implicito/personale di ciascun collaboratore.

8) Le conoscenze individuali dovrebbero avere un valore. Tante cose si possono apprendere. Insomma, sapere è potere: se faccio sapere tutto a tutti allora do anche potere agli altri. Questo è molto sentito in università

9) E' stata un'esperienza positiva e mi auguro che ci sia una ricaduta; altrimenti l'incontro non sarebbe stato in questa sede e promosso dal rettorato e certamente c'è un interesse di conoscere i risultati di questa ricerca.

10) Trovo molto utile questo scambio. Sensibilizzare è sempre positivo. Penso che si possa sensibilizzare per fare qualche proposta.

11) La migliore interazione tra accademici e amministrativi è un'esperienza ottima. Credo molto nel consensus-building.

12) Mi aspetto un miglioramento gestionale. L'incontro è stato molto utile e costruttivo.

13) E' bello e importante lavorare sulla cultura organizzativa - è una condizione per la competitività.

14) E' bello e importante lavorare sulla cultura organizzativa - è una condizione per la competitività.

16) Appunto persone di diverse aree si ritrovano per risolvere un problema e stanno funzionando abbastanza bene.

17) Es gibt zur Zeit kein Partizipationsgefuehl. Was ich oft bemaengele, ist das fehlende Zugehoerigkeitsgefuehl von vielen Kollegen. Man muss aber aus Erfahrungen der anderen lernen.

18) Cosa manca adesso è sicuramente lo spirito di sacrificio; il fare team nelle difficoltà. Diventiamo forse più egoisti. Verso l'accademia l'amministrazione non deve avere il compito di mettere i bastoni tra le ruote, cioè l'amministrazione ha un ruolo di dare forma al caos.

19) Da parte dell'amministrazione ci sono a volte delle persone che si pongono di fronte dell'accademia già con un atteggiamento di inferiorità e da parte dell'accademia ci sono persone che comunque, si comportano con un atteggiamento di superiorità rispetto all'amministrazione. Ci vuole un approccio di 'cooperative learning': dare luogo a un università che esprime un senso di appartenenza. E se c'è senso di appartenenza anche questo scambio di competenza individuali solitamente è favorito.

20) Ich glaube, wir sind noch in einer Uebergangszeit von einem alten in ein neues System. Wo wir derzeit ein bisschen leiden, ist einfach die Hektik, in der wir uns befinden, weil eben vieles sehr schnell umgesetzt werden muss und weil, durch die Sparmassnahmen, auch das Personal sehr knapp gehalten wird. Wir muessen mehr in Kommunikation investieren. Sicherlich einen staerkeren Bezug zum Praesidium koennte ich mir vorstellen. Dass man sich ab und zu abspricht und trifft und ueber bestimmte Punkte spricht.

21) Jeder verteidigt sein Revier. Ich glaube, Verwaltung und Akademie sind auf gleicher Augenhoehe. Also es braucht Autonomie, dass man jetzt als Dekan speziell nicht das Gefuehl hat, einer staendigen Kontrolle ausgesetzt zu sein.

22) I colleghi della facoltà trasferiscono le informazioni all'accademia. E' qui che si crea confusione.

23) Devi fissare degli incontri in cui spieghi tutto. Questa marea di informazioni, marea di regolamenti interne che ne abbiamo veramente tanti anche troppi e bisogna far filtrare le cose più importanti.

24) Quindi, bisogna anche essere in grado di riconoscere i limiti e cosa sono le proprie competenze.

25) Solange wir Uni so stark profitieren vom Herkommen fremder Studierender, sei es aus Nachbarprovinzen, sei es weiter entfernter Provinzen, sei es aus dem Ausland, profitieren wir (eigentlich muessten wir sie bezahlen, weil sie uns das internationale Ambiente geben). Die geben den Studierenden von der Region, die nicht nach aussen gehen, die Moeglichkeit sich mit anderen auszutauschen. Das Fremdkapital, das wir herholen, ist fuer uns enorm wichtig.

26) Ich finde, die Dreisprachigkeit ist eigentlich ein bisschen ein Gegenpol zur Internationalitaet, weil, indem wir auf Dreisprachigkeit abzielen, halten wir natuerlich sehr viele Leute ab, die die Dreisprachigkeit nicht haben.

27) Questa è una sfida e siamo gli unici ad averla e non va messa in discussione. Semmai devo discutere quali sono i mezzi per superare queste cose.

29) A volte manca il know how perchè non ci si parla.

30) Fuer einen Akademiker ist es schwer, die Entscheidungen der Verwaltung zu verstehen. Fuer uns Bereichsleiter ist es schwierig, kreativen Koepfen die Notwendigkeit gewisser Entscheidungen zu erklaren, weil wir als die so genannten Fachidioten gesehen werden.

31) Wir haben jahrelang in zwei verschiedenen Welten gelebt. Wir haben das jahrelang betrieben. Teilweise wurde das bewusst und unbewusst von der frueheren Fuehrungsspitze betrieben. Es wurde teilweise auch von einzelnen in der Akademie so gewollt, und es haben

sich solche Fronten gebildet, die man dann auch schwer ueber die Zeit abbaut. Wir sind auf diesem Niveau teilweise, wo etwas, nur weil es aus der Akademie kommt, a priori schon besser ist als das, was von der Verwaltung kommt.

32) Nella triade presidenziale vengono prese determinate decisioni e fundamentalmente le decisioni di indirizzo strategico devono soddisfare chi finanzia. Poi abbiamo una fascia intermedia direttiva e poi all'ultimo livello la fascia operativa. Ecco, a livello operativo la compenetrazione la vedo molto difficile perchè tutti sono presi dai loro processi. Quindi, l'amministrativo - il processo è il suo mondo e il docente quando va in aula la lezione e la ricerca è il suo mondo. Sto parlando dell'operativo. Che è l'ultima fascia dove avvengono i processi. E' lì che vengono fuori le frizioni.

33) Die Verwaltung hat eine Sprache und die Akademie hat eine Sprache. Die Sprache der Akademie muss verstanden werden.

34) Qualche volta, non dico sempre, spesso accade che ci sia una chiusura dall'altra parte: dalla parte accademica. Quindi, ci deve essere la disponibilità nel momento in cui si dice: queste sono le cose fattibili di muoversi; anche di accettare questa situazione. Quindi, ci deve essere l'apertura mentale: la disponibilità d'ascoltarsi reciprocamente

35) Gestern haben wir das Statut prasentiert bekommen. Es kam die Kritik, warum wurden wir Professoren nicht einbezogen und dann hat es geheissen, es gab 37 Treffen, von den 37 Treffen kenne ich keines, auf das ich eingeladen wurde.

36) Penso che i due terzi che lavorano qua - penso che, se sarebbe cambiato il colore dei tombini di Piazza Walther, sarebbe uguale - non hanno la percezione di questo problema - almeno nella mia esperienza. Spesso non è chiaro da chi vengono le direttive. E' questo il problema.

37) Es ist uns nicht genau klar, was das eigentliche Ziel ist. Wir erleben es immer wieder, dass neue Studienrichtungen eingerichtet werden, aber man versteht nicht in welchem Kontext, weil wir beispielsweise nicht ueber die richtige Fakultaet dafuer verfuegen.

38) Als ich Dekan war, habe ich zu den Leuten immer gesagt, Leute gebt dieses Geld aus. Zeigen wir ihnen, dass wir dieses Geld brauchen, dann erhalten wir es weiter. Wenn ploetzlich von 10 zwei fahren und 8 nicht, dann fragt sich die Verwaltung, warum sollen wir ihnen dieses Geld zur Verfuegung stellen?

39) Ich vermeide es auch, mit der Hauptverwaltung zu tun zu haben.

40) Die Atmosphaere im anderen Gebaeude ist eine andere als im Hauptgebaeude. Da ist es viel geschlossener und ich habe auch den Eindruck, dass man nicht genau sieht, was hier ablaeuft, welche Dynamiken hier entstehen, welche Probleme hier sind. Es ist drueben ein bisschen abgeschottet und das Raumproblem ist sicherlich nicht so einfach zu ueberwinden. Es fehlt der Bezug zur Praxis.

41) Prima anche all'interno dell'amministrazione c'erano dei fronti, dei blocchi interni: i colleghi della facoltà si sentivano in qualche modo separati da noi e viceversa. Lentamente ci si rende conto che bisogna lavorare in gruppo.

42) Es sind viele Reglementierung gekommen, die sich wieder abbauen muessen.

43) Io ho fatto un'analisi dei miei ultimi 5 mesi di tempo e ho messo sul piatto: 80 % del mio impegno è di impegni istituzionali; 20 % di ricerca e didattica. Poi alla fine mi trovo alla sera a casa e mi vedo a scrivere un articolo, presentazioni perché non trovo il tempo durante il giorno. L'aspetto amministrativo è pervasivo. Saltano fuori editti da parte dell'amministrazione che dicono: i docenti devono istituire i bandi e devono dare la traduzione del bando nelle tre lingue. Se non sapete una lingua contattate un collega di madrelingua. L'analisi che faccio io è che per andare avanti le rigidità non vanno bene e ci vuole un po' di flessibilità da parte di tutti. Quindi, il problema è quello della flessibilità.

44) Il legislatore, in Italia, è sempre molto vago e nebuloso ed è importante avere questo scambio e riuscire a capire come si vedono le cose.

45) Non c'è tempo per la riflessione. Non ci sono dei momenti di riflessioni che non sono votati ad avere immediatamente un risultato subito. Ci vorrebbe change management che, secondo me, è un accompagnamento da una situazione di fatto verso una situazione nuova sapendo su che cosa si vuole andare. Però che non investe solo in modalità operative del lavoro quotidiano, ma è un cambiamento culturale.

46) Wir sind alle Unternehmer, weil wir uns in eigenen wissenschaftlichen Bereichen bewegen und starke Individuen sind. Somit sind diese Individuen dauernd am Herumrennen und haben wenig Ruhepausen, um sich mit anderen wiederzufinden. Wir leiden alle an der Schnelligkeit. Das Problem ist die Zeit. Es wird viel dem Zufall überlassen, weil es keine institutionellen Momente gibt. Der Faktor Zeit ist Luxus.

47) Ognitanto would give more space to the meetings that will be left even more space to express opinions. Now the meetings are structured in such a way that they are given the information and then there is a brief discussion and then arrive at a decision. Not always, in my opinion, there is time to explore certain things.

48) Mi sento soffocato dal lavoro e frustrato per non poter fare adeguata ricerca.

49) Es fehlt die Zeit der Reflexion und daher kann man keine strategischen Entscheidungen treffen. Ich glaube auch, die Prioritätensetzung funktioniert oft nicht. Es gibt sehr viele Initiativen von verschiedenen Seiten. Jeder meint, er müsse etwas machen, aber es ist dann nicht klar, was die Priorität ist. Und man verliert sich oft in diesen vielen Tätigkeiten und das verursacht viel Stress.

50) Quello che in parte manca è il trarre vantaggio di una 'win-win-situation' da competenze che ci sono in altre facoltà. Nascono le gelosie.

51) Già noi siamo segmentati e ognuno vede il proprio ambito, il proprio segmento. Ognuno ha la propria visione; forse è proprio più impegnativo dal punto di vista psicologico per me di cercare di sederci tutti a un tavolo e integrarci e coordinarci e cercare di uscire con un sistema più coordinato, più coerente, con meno ridondanze e con meno criticità.

52) Ci sono delle subculture: se un gruppo si allarga allora va a discapito degli altri. Forse guarda il mondo nel proprio vicino invece di fare gruppo come università e fare rete con altre discipline. Finché non cambia questo modo di vedere le cose niente cambia.

53) Tanti problemi che noi abbiamo all'interno è la non-conoscenza delle procedure e dei ruoli per la mancanza di dialogo.

- 54) Secondo me, aprirsi molto ed essere disponibili ad ascoltare, anche ai suggerimenti, non so anche gli inputs che vengono dai colleghi.
- 55) ...dass auch der Respekt da ist fuer die verschiedenen Rollen. Und Respekt bedeutet, dass man sagt, dass jeder in seinem Bereich arbeitet und dann auch die Kenntnisse, das Know-How, die Kompetenz dieser Person respektiert und natuerlich im Gespraech seine Sichtweise ins Spiel bringt.
- 56) Bisogna riconoscere le conoscenze tacite di ogni singolo collaboratore.
- 57) Die Institution muss einen gemeinsamen Nenner haben. Es muessen messbare und qualitative und quantitative Ziele festgelegt werden. Das wird dann 'ein agreement' fuer den Mitarbeiter selber; dann weiss er genau, wohin es geht fuer sich selber. Das macht er selbst. Das Erreichen des Ziels ergibt Gluecksgefuehl. Es ist wie ein Adrenalin. Diese Ziele werden im Dialog bestimmt. Die Ziele muessen fuer den Mitarbeiter verstaendlich sein.
- 58) Unser Hauptgeldgeber, die Landesregierung, moechte, dass sich die Universität auf bestimmte Themen konzentriert. Sie moechte, dass sich die Uni stark mit dem Thema Dreisprachigkeit auseinandersetzt und diese verbessert. Und das muss ihr Ziel sein.
- 59) It is very important to have common values and goals, so that the organization moved towards a certain direction.
- 60) Tra le strategie principali c'è il trilinguismo e bisogna renderlo elemento di forza e fare chiarezza subito su tutti gli obiettivi strategici.
- 61) Tutti hanno lo stimolo di imparare. Parlo con i tedeschi in tedesco, con gli Italiani in Italiano e la facoltà la gestisco in Inglese. Comunque, comporta un trasferimento di conoscenze; in questo caso linguistico che porta alla nascita di nuove cose. Io partirei attraverso della progettualità partendo dal basso a livello di gruppi. Devono essere sotto un certo ombrello e l'ombrello deve essere ampio; deve entrare nuova linfa da chi ha dei background diversi - bisogna definire la tematica - ma un ombrello assolutamente flessibile e queste possono essere grandi tematiche di interesse per la società.
- 62) Wir muessen einfach Moeglichkeiten finden, dass Mitarbeiter motivierbar bleiben. Mitarbeiter muessen die Chance haben, Probleme zu loesen und Fehler zu machen. Wenn er die Moeglichkeit hat, seine Herausforderungen selbst zu meistern, dann hat er ein Hoechstmass an Motivation. Durch Motivation wird Eigenverantwortung und Freude ausgeloeset.
- 63) Ich glaube an eine Universitätskultur. Es muesste Raeume geben, wo sich Professoren spontan aufhalten. Dort entsteht ein ungezwungener Kontakt. Es muss auch Momente geben, wo gesteuert Austausch stattfindet.
- 64) Eine Antriebsfeder ist sicherlich die Identifikation mit der Organisation.
- 65) La prima cosa è di creare un clima di fiducia reciproca.
- 66) Bisogna avere l'umiltà che ci sono delle persone che possono sapere più di me; hanno un punto di vista diverso; il concetto dell'interdisciplinarity è per valorizzare le sinergie. Il concetto dell'interdisciplinarietà è quello di guardarlo da diversi punti di vista e non

assegnare dei ruoli chiari. Abbiamo fatto quest'anno un 'research day' dell'università dove ogni facoltà ha dato una overview della propria facoltà e delle proprie competenze. Conoscerci è già un primo passo. Sono nate delle collaborazioni che prima non erano possibili.

67) Was die Uni in den letzten Jahren sehr viel besser gemacht hat, ist, dass sie die akademische Welt viel starker eingebunden und auch viel verantwortlicher gemacht hat. Kommunikation muss im Netzwerk funktionieren, d. h. sie muss in alle Richtungen laufen: von links nach rechts, von oben nach unten, im Idealfall in verbaler Form erfolgen muesste, im Dialog 'face-to-face'.

68) Solo con il dialogo e con l'ascolto si può ottenere la comprensione. Se il buon senso e il dialogo sono dentro di noi allora anche nel mondo del lavoro riusciamo a capirci. Bisogna parlarsi di più; non solo di lavoro, ma anche di altri argomenti per capirsi meglio.

69) Ci deve essere il tempo per il team-building. Attraverso il coinvolgimento di tante persone o di più persone potrebbero emergere delle cose.

70) Erfahrung ist etwas Wichtiges. Jetzt habe ich das Gefuehl, jetzt haben wir Erfahrung und die naechste Stufe keonnte sein, dass wieder Austausch generiert wird, um zu optimieren.

71) Sono questi incontri dei gruppi trasversali dove forse fare entrare nel futuro anche persone del corpo accademico o chi è interessato. Le due parti devono colloquiare.

72) Bisogna trovare spazi e tempi per incontri formali e informali tra colleghi e docenti e personale amministrativo per poi approfondire le conoscenze oltre al proprio raggio di azione per comprendere l'altro.

73) Quelle volte che qualcosa in quel senso si fa: responsabile amministrativo che viene dal corpo docente riunito appositamente a parlare delle nuove procedure le cose funzionano.

74) Bisogna creare dei momenti di ritrovarsi come comunità. Recuperare certi momenti comuni, certe date, certi riferimenti per l'ateneo è una cosa importante. E' un momento nel quale si dovrebbe fare un pò una sintesi di quello che abbiamo fatto e anche di quello che faremo; dare anche il tempo per arrivare dall'a alla z.

75) Man muss Momente finden, wo sich die Unigemeinschaft als Gemeinschaft sieht und wir sind stolz und wir sind was Besonderes. Man muss somit Begegnungsmomente finden, um Austausch zu ermoeglichen. Das erfordert Zeit.

76) Ci vuole più tempo che abbiamo adesso. Non bisogna essere oberati dal lavoro.

77) Abbiamo un vantaggio perchè siamo piccoli, perchè - nella nostra facoltà - abbiamo una direzione che ha sempre avuto le idee chiare.

78) Noi essendo giovani, piccoli e forse abbiamo anche un elemento di dinamicità maggiore che ci permetterebbe di reagire più velocemente a certi mutamenti della società, a certi mutamenti del fabbisogno di formazione.

79) Nischen wird man in dem Moment auf tun, wenn man eine andere Form der Wissensvermittlung im Generellen findet - wenn man den Mehrwert erkennt: Ich muss

Achtung und Beachtung schenken. Wissensvermittlung bedeutet, den anderen zu verstehen. Ich muss den anderen dort abholen, wo er ist. Verstehen, wo es drueckt ist auch Wissenstransfer. Ich muss kontextmaessig auf das gleiche Niveau kommen und dann habe ich erst einen Kanal gefunden, ueber den man kommunizieren kann. Ich muss die richtigen Fragen stellen.

80) Viel gegenseitiger Dialog und Austausch ist notwendig, dass man sich wirklich kennenlernt. Und das koennte so geloest werden, dass man sich viel mehr getraut auszutauschen, einmal jemand von der Verwaltung in eine akademische Taetigkeit schicken und umgekehrt.

81) Man muesste es einfach zulassen, dass die Menschen sich viel freier dieses individuelle Wissen austauschen koennen und riskieren, in der Forschung und in der Lehre ein Abenteuer einzugehen. Es gilt, Raeume zu schaffen fuer sinnloses Zusammensein, die Interdisziplinarität zu pflegen.

82) Man muss sich zu diesen Themen gemeinsam unterhalten. Es braucht einen Moment der Reflexion und der Analyse, wo man auch aufeinander eingeht und mit allen Beteiligten alles bespricht.

83) Vor kurzer Zeit bin ich nach Paris gefahren, um dort, zusammen mit einer Verwaltungsangestellten, eine Ausstellung vorzubereiten. Wir sind direkt zum Ausstellungsgebäude gefahren. Da nichts vorbereitet war, habe ich zusammen mit meiner Mitarbeiterin die Ausstellung hergerichtet. Diese Zusammenarbeit fuehrte zu gegenseitigem Verstaendnis. Da ist viel Wissen geflossen. Von ihnen auch, dass sie erfuhren, dass ich meine Haltung aendern kann und andere Sachen zulassen kann. Durch die Vorbildfunktion.

84) L'Euregio che va a coprire la vecchia regione asburgica come un unico bacino di interesse - per creare un asse di collaborazione - abbiamo creato un corso magistrale sulla gestione degli ambienti montani che facciamo in collaborazione con Innsbruck. Il consiglio di corso è unico. La governance del corso è trasversale.

85) Ein Wissenschaftler hat eine super Idee und wir sagen, mit welchen Werkzeugen es der Wissenschaftler machen kann.

86) Nella facoltà abbiamo bisogno delle figure intermedie. Dobbiamo creare un supporto 'blended'.



STATUTO

Libera Università di Bolzano

STATUT

Freie Universität Bozen

STATUTE

Free University of Bozen-Bolzano

Erlassen mit Dekret des Präsidenten des Universitätsrates Nr. 48 vom 31.10.2013
Veröffentlicht im Gesetzesanzeiger Nr. 276 vom 25.11.2013

Emanato con Decreto del Presidente del Consiglio dell'Università n. 48 del 31.10.2013
Pubblicato sulla Gazzetta Ufficiale n. 276 del 25.11.2013

Indice

I. DISPOSIZIONI GENERALI	4
Art. 1 - Forma giuridica, autonomia dell'Università e sigillo.....	4
Art. 2 - Finalità e principi	5
Art. 3 - Fonti di finanziamento.....	6
II. ORGANI DELL'UNIVERSITÀ.....	7
Art. 4 - Organi dell'Ateneo	7
<i>ORGANI DI GOVERNO DELL'UNIVERSITÀ.....</i>	<i>8</i>
Art. 5 - Composizione del Consiglio dell'Università	8
Art. 6 - Attribuzioni del Consiglio dell'Università	9
Art. 7 - Presidente	12
Art. 8 - Senato accademico.....	14
Art. 9 - Rettore/Rettrice.....	15
Art. 10 - Direttore/Direttrice.....	17
<i>ORGANI CENTRALI DELL'ATENEO.....</i>	<i>19</i>
Art. 11 - Commissione di ricerca.....	19
Art. 12 - Commissione per gli studi.....	20
Art. 13 - Presidio di qualità	21
<i>ORGANI DELLE STRUTTURE ACCADEMICHE</i>	<i>22</i>
Art. 14 - Facoltà e organi.....	22
Art. 15 - Preside	22
Art. 16 - Consiglio di Facoltà	24
Art. 17 - Direttori/Direttrici di corso di studio	25
Art. 18 - Consiglio del corso di studio.....	25
Art. 19 - Commissione didattica paritetica	26
<i>CENTRI PER LA DIDATTICA E LA RICERCA</i>	<i>27</i>
Art. 20 - Centri per la didattica (Scuole/Schools)	27
Art. 21 - Centri di competenza per la ricerca.....	27
<i>ALTRI ORGANI</i>	<i>28</i>
Art. 22 - Collegio dei revisori dei conti.....	28
Art. 23 - Nucleo di valutazione	28
Art. 24 - Collegio di disciplina.....	29
Art. 25 - Commissione etica	30
Art. 26 - Consulta degli studenti.....	30
Art. 27 - Comitato per le pari opportunità.....	31
III. STUDI	32
Art. 28 - Offerta didattica	32
Art. 29 - Cooperazione ed altre attività istituzionali	32
IV. CENTRI DI SERVIZIO.....	34
Art. 30 - Centri di servizio	34

Index

I. ALLGEMEINE BESTIMMUNGEN.....	4
Art. 1 - Rechtsform, Autonomie der Universität und Siegel.....	4
Art. 2 - Ziele und Grundsätze.....	5
Art. 3 - Finanzierungsquellen.....	6
II. GREMIEN DER UNIVERSITÄT	7
Art. 4 - Gremien der Universität.....	7
<i>LEITUNGSGREMIEN DER UNIVERSITÄT</i>	<i>8</i>
Art. 5 - Zusammensetzung des Universitätsrates	8
Art. 6 - Zuständigkeiten des Universitätsrates	9
Art. 7 - Präsident/Präsidentin.....	12
Art. 8 - Senat.....	14
Art. 9 - Rektor/Rektorin	15
Art. 10 - Universitätsdirektor/ Universitätsdirektorin	17
<i>ZENTRALE AKADEMISCHE GREMIEN.....</i>	<i>19</i>
Art. 11 - Forschungskommission	19
Art. 12 - Studienkommission.....	20
Art. 13 - Qualitätspräsidium.....	21
<i>GREMIEN DER AKADEMISCHEN STRUKTUREN</i>	<i>22</i>
Art. 14 - Fakultäten und deren Gremien	22
Art. 15 - Dekan/Dekanin	22
Art. 16 - Fakultätsrat	24
Art. 17 - Studiengangsleiter/	
Studiengangsleiterinnen.....	25
Art. 18 - Studiengangsrat.....	25
Art. 19 - Paritätisch-Didaktische Kommission.....	26
<i>ZENTREN FÜR LEHRE UND FORSCHUNG.....</i>	<i>27</i>
Art. 20 - Zentren für Lehre (Schulen/Schools)	27
Art. 21 - Kompetenzzentren für die Forschung	27
<i>ANDERE GREMIEN</i>	<i>28</i>
Art. 22 - Rechnungsprüferkollegium	28
Art. 23 - Evaluierungskomitee.....	28
Art. 24 - Disziplinarkommission.....	29
Art. 25 - Ethikkommission	30
Art. 26 - Studierendenbeirat.....	30
Art. 27 - Beirat für Chancengleichheit.....	31
III. STUDIEN.....	32
Art. 28 - Studienangebot.....	32
Art. 29 - Kooperation und andere institutionelle Aktivitäten	32
IV. DIENSTLEISTUNGSEINRICHTUNGEN	34
Art. 30 - Dienstleistungseinrichtungen	34

V. DISPOSIZIONI AMMINISTRATIVE	34	V. VERWALTUNGSBESTIMMUNGEN	34
Art. 31 - Principi dell'organizzazione e dell'amministrazione.....	34	Art. 31 - Grundsätze der Organisation und Verwaltung	34
Art. 32 - Piano di organizzazione e regolamento per l'amministrazione, la finanza e la contabilità	35	Art. 32 - Organisationsplan und Verwaltungs- und Finanzordnung der Universität.....	35
VI. DISPOSIZIONI FINALI.....	35	VI. SCHLUSSBESTIMMUNGEN	35
Art. 33 - Entrata in vigore dello Statuto.....	35	Art. 33 - Rechtswirksamkeit des Statuts	35

I. DISPOSIZIONI GENERALI

Art. 1 - Forma giuridica, autonomia dell'Università e sigillo

1. La Libera Università di Bolzano, in tedesco "Freie Universität Bozen", in ladino "Università Lìdia de Bulsan", in inglese "Free University of Bozen-Bolzano", di seguito denominata "Università", ha sede principale a Bolzano e sedi distaccate a Bressanone e a Brunico.
2. L'Università appartiene alla categoria degli istituti universitari previsti dall'art. 1, n. 2, del testo unico delle leggi sull'istruzione superiore, approvato con Regio Decreto 31 agosto 1933, n. 1592, ed è autorizzata a rilasciare titoli di studio universitario aventi valore legale ai sensi dell'art. 6, comma 1, della legge 7 agosto 1990, n. 245.
3. L'Università è autonoma ai sensi dell'art. 33 della Costituzione e ha personalità giuridica e autonomia didattica, scientifica, organizzativa, amministrativa e disciplinare nei limiti delle leggi sull'ordinamento universitario.
4. L'Università garantisce la libertà di ricerca e di insegnamento sancita dalla Costituzione e si conforma ai principi contenuti nella *Magna Charta Universitatum* del 18 settembre 1988.
5. In aggiunta e ad integrazione dell'offerta formativa e della ricerca, l'Università ha la facoltà di stipulare, a livello internazionale, nazionale e regionale, accordi con altre università, Centri scientifici, Accademie di belle arti, l'Accademia nazionale di arte drammatica, gli Istituti superiori per le industrie artistiche e gli Istituti superiori di studi musicali e coreutici di cui all'art. 2 della legge 508 del 21 dicembre 1999, i Conservatori di musica, le Istituzioni dell'alta formazione artistica e musicale, gli Istituti filosofico-teologici ossia gli Istituti di formazione superiore in scienze religiose di cui al D.M. del 15 luglio 1987, in applicazione del D.P.R. n. 751 del 16 dicembre 1985. Tali accordi possono essere collaborazioni,

I. ALLGEMEINE BESTIMMUNGEN

Art. 1 - Rechtsform, Autonomie der Universität und Siegel

1. Die Freie Universität Bozen, italienisch "Libera Università di Bolzano", ladinisch "Università Lìdia de Bulsan", englisch "Free University of Bozen-Bolzano", in der Folge „Universität“ genannt, hat ihren Hauptsitz in Bozen und Nebensitze in Brixen und Bruneck.
2. Die Universität gehört zu den universitären Einrichtungen gemäß Art. 1, Nr. 2 des Einheitstextes der Gesetze über die postsekundäre Ausbildung, genehmigt mit Königlichem Dekret Nr. 1592, vom 31. August 1933. Sie ist ermächtigt, akademische Studientitel zu verleihen, die im Sinne von Art. 6, Abs. 1 des Gesetzes Nr. 245 vom 7. August 1990 anerkannt sind.
3. Gemäß Art. 33 der Verfassung ist die Universität autonom. Sie besitzt im Rahmen der Universitätsordnung Rechtspersönlichkeit sowie Autonomie in Lehre, Forschung, Organisation, Verwaltung und disziplinarischen Belangen.
4. Die Universität garantiert laut Verfassung die Freiheit von Forschung und Lehre und befolgt die in der *Magna Charta Universitatum* vom 18. September 1988 enthaltenen Grundsätze.
5. Zur Erweiterung des Angebots in Lehre und Forschung kann die Universität auf internationaler, staatlicher und regionaler Ebene Abkommen mit anderen Universitäten, Forschungseinrichtungen, Kunstakademien, der Nationalen Akademie für Schauspielkunst, den Hochschulen für angewandte Kunst und Industriedesign und den gemäß Art. 2 des Gesetzes Nr. 508 vom 21. Dezember 1999 errichteten Hochschulen für Musik und Tanz, den Musikkonservatorien sowie den Einrichtungen für höhere künstlerische und musikalische Bildung, den philosophisch-theologischen Hochschulen bzw. den höheren Instituten für Theologische Bildung gemäß Ministerialdekret vom 15. Juli 1987, in Anwendung des D.P.R. vom 16. Dezember

incorporamenti istituzionali o avere come oggetto il riconoscimento di crediti formativi universitari.

6. Il sigillo circolare dell'Università raffigura un libro che si apre tra due ali e che è posto sopra un grappolo d'uva costituito da sei acini. Al di sopra del libro si erge un'asta di mercurio. La scritta in carattere *capitalis* collocata tra una doppia linea esterna (una linea sottile e una linea d'ombra) e una doppia linea interna (una linea d'ombra e una linea perlata) recita: UNIVERSITAS STUDIORUM BAUZANENSIS.
7. Il sigillo è raffigurato nell'allegato A che costituisce parte integrante del presente statuto.

Art. 2 - Finalità e principi

1. L'Università, sede di ricerca e di formazione scientifica e professionale, istituzione plurilingue a riferimento internazionale, promuove e coordina le proprie attività nell'ambito della didattica e della ricerca, dell'apprendimento permanente e della diffusione delle conoscenze. In sinergia con altre istituzioni, concorre al perseguimento degli obiettivi di crescita culturale e di sviluppo tecnologico, socio-economico ed ambientale della società.
2. L'Università favorisce la partecipazione degli studenti/delle studentesse alle attività della stessa. Promuove la cooperazione culturale e scientifica a livello nazionale ed internazionale, anche tramite accordi sia con le istituzioni territoriali sia con università e istituti di ricerca internazionali o di aree limitrofe e si impegna per la diffusione del plurilinguismo nell'attività didattica ed amministrativa.
3. L'Università favorisce in modo particolare programmi di studio e di ricerca comuni, scambi di professori/professoressa, ricercatori/ricercatrici e studenti/studentesse nell'ambito del sistema della "Euregio delle Università di Bolzano, Innsbruck e Trento" e la collaborazione tra tutti i centri di ricerca e formazione all'interno della stessa Euregio.

1985, Nr. 751, abschließen. Diese Abkommen können Kooperationen, institutionelle Eingliederungen oder die Anerkennung von Kreditpunkten zum Inhalt haben.

6. Das Rundsiegel der Universität besteht aus einem sich öffnenden Buch zwischen zwei Flügeln über einer aus sechs Kernen bestehenden Weintraube. Darüber erhebt sich ein Merkurstab. Die Umschrift in *Kapitalis* zwischen einer doppelten äußeren (einer Haar- und einer Schattenlinie) und einer doppelten inneren Linie (einer Schatten- und einer Perllinie) lautet: UNIVERSITAS STUDIORUM BAUZANENSIS.
7. Das Siegel ist in der Anlage A als integrierender Bestandteil dieses Statutes abgebildet.

Art. 2 - Ziele und Grundsätze

1. Als mehrsprachige und international ausgerichtete Einrichtung für Forschung und Lehre ist die Universität in folgenden Bereichen tätig: Lehre und Forschung, lebenslanges Lernen und Wissenstransfer. Im Zusammenwirken mit anderen Institutionen trägt sie auf diese Weise zur kulturellen, technologischen, sozio-ökonomischen und ökologischen Entwicklung der Gesellschaft bei.
2. Die Universität fördert die Beteiligung der Studierenden an ihren Tätigkeiten. Sie fördert die kulturelle und wissenschaftliche Zusammenarbeit auf nationaler und internationaler Ebene auch durch Abkommen mit lokalen Einrichtungen und mit internationalen oder benachbarten Universitäten und Forschungseinrichtungen und unterstützt die Verbreitung der Mehrsprachigkeit in Lehre und Verwaltung.
3. Die Universität fördert insbesondere gemeinsame Studien- und Forschungsprogramme, Austausch von Professoren/Professorinnen, Forschern/Forscherinnen und Studierende im Rahmen der „Euregio Universitäten Bozen-Innsbruck-Trient“ und die Zusammenarbeit aller Forschungs- und Bildungseinrichtungen in der Euregio.

4. Tenuto conto dell'indirizzo internazionale dell'Università e delle esigenze didattiche plurilingui che ne conseguono, vengono di norma utilizzate, accanto alle lingue locali tedesco, italiano e ladino, anche lingue straniere, l'inglese in particolare. In conformità alle Linee guida in merito al plurilinguismo, particolare attenzione è data ad un impiego equilibrato delle lingue ufficiali in cui si tengono le lezioni. Per motivi pratici e didattici può essere previsto un utilizzo anche disgiunto delle predette lingue. L'impiego delle lingue è definito negli ordinamenti didattici dei singoli corsi di studio.
5. L'Università favorisce attività di ricerca, di consulenza professionale, e servizi a favore di terzi sulla base di appositi contratti e convenzioni.
6. L'Università, anche in collaborazione con enti pubblici e privati, può offrire a tutti/e i suoi/le sue componenti determinati servizi culturali, ricreativi, residenziali e di assistenza per l'inserimento nell'ambiente di studio e di lavoro.
4. Aufgrund der internationalen Ausrichtung der Universität und der damit verbundenen Anforderungen an die Mehrsprachigkeit in der Lehre werden in der Regel neben den Landessprachen Deutsch, Italienisch und Ladinisch auch Fremdsprachen (insbesondere Englisch) verwendet. Entsprechend der Richtlinien zur Mehrsprachigkeit wird auf einen ausgewogenen Einsatz der offiziellen Unterrichtssprachen geachtet. Aus praktischen und didaktischen Gründen können die genannten Sprachen getrennt voneinander verwendet werden. Der Einsatz der Sprachen wird in den jeweiligen Studienordnungen der einzelnen Studiengänge festgelegt.
5. Die Universität fördert die Forschungs- und die wissenschaftliche Beratungstätigkeit sowie Dienstleistungen zugunsten Dritter auf der Grundlage entsprechender Verträge und Vereinbarungen.
6. Die Universität kann ihren Mitgliedern, in Zusammenarbeit mit öffentlichen Körperschaften und privaten Trägern, Dienstleistungen in den Bereichen Kultur, Erholung, Unterkunft und bei der Eingliederung in das Studium und in den Beruf anbieten.

Art. 3 - Fonti di finanziamento

1. Al funzionamento ed allo sviluppo dell'Università sono destinati i finanziamenti ed i contributi della Provincia Autonoma di Bolzano (art. 17, c. 120 ss., art. 2, c. 123 L. n. 127/1997 e L. n. 191/2009), della Regione e dello Stato, le tasse, i contributi e i diritti versati dagli studenti, tutti i beni ed i proventi delle attività istituzionali e le erogazioni ed i fondi ad essa conferiti a qualunque titolo, da enti pubblici, imprese e privati interessati al raggiungimento dei fini istituzionali dell'Università.
2. L'Università può partecipare o costituire società imprese, fondazioni, associazioni o consorzi per lo svolgimento di attività strumentali laddove di supporto alla didattica e alla ricerca o comunque utili per il conseguimento dei propri fini istituzionali. Eventuali ricavi derivanti da partecipazioni saranno impiegati a sostegno delle attività didattiche e di ricerca.

Art. 3 - Finanzierungsquellen

1. Zur Führung und Entwicklung der Universität tragen folgende Einnahmen bei: Zuwendungen und Beiträge der Autonomen Provinz Bozen (Art. 17, Abs. 120 ff. Gesetz Nr. 127/1997 und Art. 2, Abs. 123 Gesetz Nr. 191/2009), der Region und des Staates, Gebühren, Beiträge und Abgaben der Studierenden, Güter und Einnahmen aus der institutionellen Tätigkeit sowie Zuwendungen und Mittel von öffentlichen Körperschaften, Unternehmen und Privatpersonen, die die Ziele der Universität unterstützen.
2. Die Universität kann sich an Gesellschaften Unternehmen, Stiftungen, Vereinen und Konsortien beteiligen oder solche gründen, sofern diese die Lehre und Forschung unterstützen oder zum Erreichen ihrer institutionellen Ziele beitragen. Eventuelle Gewinne aus Beteiligungen werden zur Unterstützung von Lehre und Forschung verwendet.

II. ORGANI DELL'UNIVERSITÀ

Art. 4 - Organi dell'Ateneo

1. Gli organi di governo dell'Università sono:
 - a) il Consiglio dell'Università
 - b) il/la Presidente
 - c) il Senato accademico
 - d) il Rettore/la Rettrice
 - e) il Direttore/la Direttrice
2. Gli organi accademici centrali sono:
 - a) la Commissione di ricerca
 - b) la Commissione per gli studi
 - c) il Presidio di qualità
3. Gli organi delle strutture accademiche sono:
 - Facoltà:
 - a) il Preside/la Preside
 - b) il Consiglio di facoltà
 - c) il Consiglio del corso di studio
 - d) la Commissione didattico paritetica
4. Altri organi sono:
 - a) il Collegio dei revisori dei conti
 - b) il Nucleo di valutazione
 - c) il Collegio di disciplina
 - d) la Commissione etica
 - e) la Consulta degli studenti
 - f) il Comitato delle pari opportunità
5. Centri per la didattica e la ricerca sono:
 - le Scuole (Schools)
 - i Centri di competenza per la ricerca

II. GREMIEN DER UNIVERSITÄT

Art. 4 - Gremien der Universität

1. Leitungsgremien der Universität sind:
 - a) Universitätsrat
 - b) Präsident/Präsidentin
 - c) Senat
 - d) Rektor/Rektorin
 - e) Universitätsdirektor/Universitätsdirektorin
2. Zentrale akademische Gremien sind:
 - a) Forschungskommission
 - b) Studienkommission
 - c) Qualitätspräsidium
3. Gremien der akademischen Strukturen sind:
 - Fakultäten:
 - a) Dekan/Dekanin
 - b) Fakultätsrat
 - c) Studiengangsrat
 - d) Paritätisch-didaktische Kommission
4. Andere Gremien sind:
 - a) Rechnungsprüferkollegium
 - b) Evaluierungskomitee
 - c) Disziplinarkommission
 - d) Ethikkommission
 - e) Studierendenbeirat
 - f) Beirat für Chancengleichheit
5. Zentren für Lehre und Forschung sind:
 - Schulen (Schools)
 - Kompetenzzentren der Forschung

ORGANI DI GOVERNO DELL'UNIVERSITÀ

Art. 5 - Composizione del Consiglio dell'Università

1. Il Consiglio dell'Università è composto dai seguenti membri, che devono avere la padronanza attiva di una delle tre lingue ufficiali della provincia e la conoscenza almeno passiva di una seconda:
 - a) il Rettore/la Rettrice;
 - b) quattro membri nominati dalla Provincia Autonoma di Bolzano tra persone esperte nell'ambito della scienza, della cultura, della tecnica, dell'economia, delle attività sanitarie e sociali o della vita pubblica, di cui almeno uno per ciascuno dei tre gruppi linguistici tedesco, italiano e ladino;
 - c) un membro nominato dal Senato accademico che non sia contemporaneamente componente di questa università;
 - d) un/una rappresentante degli studenti/delle studentesse, secondo il Regolamento elezioni.
2. Il Consiglio dell'Università nomina al suo interno, tra i/le componenti di cui alla lettera b), il/la Presidente e un/una Vicepresidente, i quali/le quali devono appartenere a gruppi linguistici differenti.
3. Nella composizione del Consiglio dell'Università si pone particolare attenzione al rispetto dell'adeguata rappresentanza femminile.
4. Alle sedute del Consiglio dell'Università partecipano, con diritto di voto consultivo, il/la Direttore/Direttrice e i/le Presidenti onorari/e.
La qualifica di membro effettivo del Consiglio dell'Università è incompatibile con l'esercizio di un mandato politico.

LEITUNGSGREMIEN DER UNIVERSITÄT

Art. 5 - Zusammensetzung des Universitätsrates

1. Der Universitätsrat setzt sich aus folgenden Mitgliedern zusammen, wobei diese zumindest eine der drei Landessprachen aktiv und die zweite passiv beherrschen müssen:
 - a) dem Rektor/der Rektorin;
 - b) vier von der Autonomen Provinz Bozen ernannten Mitgliedern aus den Bereichen Wissenschaft, Kultur, Technik, Wirtschaft, Gesundheits- und Sozialwesen oder des öffentlichen Lebens, von denen mindestens je eines der deutschen, der italienischen und der ladinischen Sprachgruppe angehört;
 - c) ein vom Senat ernanntes Mitglied, welches nicht zugleich Mitglied dieser Universität ist;
 - d) einem/einer gemäß Wahlordnung gewählten Vertreter/Vertreterin der Studierenden.
2. Der Universitätsrat bestellt aus dem Kreis der gemäß Buchstabe b) ernannten Mitglieder den Präsidenten/die Präsidentin und einen Vizepräsidenten/eine Vizepräsidentin, die jeweils einer anderen Sprachgruppe angehören müssen.
3. Bei der Zusammensetzung des Universitätsrates wird auf ein ausgewogenes Gleichgewicht der Geschlechter geachtet.
4. An den Sitzungen des Universitätsrates nehmen mit beratender Stimme der Universitätsdirektor/die Universitätsdirektorin und die Ehrenpräsidenten/Ehrenpräsidentinnen teil. Die effektive Mitgliedschaft im Universitätsrat ist mit der Ausübung eines politischen Mandats unvereinbar.

- | | |
|--|---|
| <p>5. Qualora, entro sessanta giorni dalla richiesta, non pervenga la nomina di uno/una o più componenti, il Consiglio dell'Università si ritiene validamente costituito, a condizione che sia raggiunta la maggioranza dei suoi/delle sue componenti.</p> <p>6. I/le componenti del Consiglio dell'Università, ad eccezione del/della rappresentante degli studenti/delle studentesse, rimangono in carica per quattro anni e possono essere confermati/e; il Rettore/la Rettrice rimane in carica quale componente del Consiglio dell'Università per tutta la durata del suo mandato.</p> <p>7. Qualora debbano essere sostituiti/e uno/a o più componenti, si provvederà alla nomina dei/delle componenti mancanti. Nel caso in cui venga meno oltre la metà dei/delle componenti si intenderà decaduto l'intero Consiglio e si procederà immediatamente alla nomina di un nuovo Consiglio. Il/la Presidente del Consiglio decaduto svolge le operazioni di ordinaria amministrazione sino alla nomina del nuovo Consiglio.</p> | <p>5. Falls ein oder mehrere Mitglieder nicht innerhalb von sechzig Tagen nach entsprechender Aufforderung bestellt werden, ist der Universitätsrat trotzdem wirksam errichtet, sofern die Mehrheit seiner Mitglieder erreicht ist.</p> <p>6. Die Mitglieder des Universitätsrates bleiben, mit Ausnahme des Vertreters/der Vertreterin der Studierenden, vier Jahre im Amt und können bestätigt werden; der Rektor/die Rektorin bleibt Mitglied des Universitätsrates für die gesamte Dauer seines/ihrer Mandates.</p> <p>7. Falls ein oder mehrere Mitglieder aus dem Amt scheiden, werden die fehlenden Mitglieder ernannt. Sollten mehr als die Hälfte der Mitglieder aus dem Amt scheiden, verfällt der gesamte Universitätsrat und wird unverzüglich erneuert. Der Präsident/die Präsidentin des verfallenen Universitätsrates führt bis zur Ernennung des neuen Universitätsrates die ordentlichen Geschäfte weiter.</p> |
|--|---|

Art. 6 - Attribuzioni del Consiglio dell'Università

1. Il Consiglio dell'Università è il massimo organo di governo dell'Università.
2. Il Consiglio dell'Università:
 - a) determina l'indirizzo generale di sviluppo dell'Università ed emette le relative direttive;
 - b) approva, tenendo conto dei pareri emessi dal Nucleo di valutazione e sentito il Senato accademico, i piani pluriennali (didattica e ricerca) e il piano di sviluppo dell'Università;
 - c) approva, sentito il Senato accademico, il programma annuale delle attività e la relazione sulla gestione dell'Università;
 - d) approva il bilancio di previsione nonché il bilancio consuntivo dell'Università;
 - e) approva le convenzioni che il presente statuto non demanda ad altri organi; il Consiglio dell'Università può delegare la stipula di accordi e convenzioni al/alla

Art. 6 - Zuständigkeiten des Universitätsrates

1. Der Universitätsrat ist das oberste Leitungsorgan der Universität.
2. Der Universitätsrat:
 - a) bestimmt die allgemeine Ausrichtung der Universitätsentwicklung und erlässt die entsprechenden Richtlinien;
 - b) genehmigt die Mehrjahrespläne (Lehre und Forschung) und den Universitätsentwicklungsplan unter Berücksichtigung der Bewertungen des Evaluierungskomitees und nach Anhörung des Senats.
 - c) genehmigt nach Anhörung des Senats das Jahrestätigkeitsprogramm und den Jahresabschlussbericht der Universität;
 - d) genehmigt den Haushaltsvoranschlag und den Jahresabschluss der Universität;
 - e) genehmigt die Konventionen, die laut diesem Statut nicht anderen Gremien zur Beschlussfassung vorbehalten sind; der Universitätsrat kann den Abschluss von

Presidente, al Direttore/alla Direttrice o al Rettore/alla Rettrice;

- f) approva, sentito il Senato accademico, l'istituzione e la chiusura di strutture organizzative accademiche, Facoltà, centri per la didattica e la ricerca;
- g) approva l'istituzione e l'attivazione di corsi di studio e di programmi di formazione;
- h) approva l'istituzione e l'attivazione di *Spin-off* e *Start-up*.
- i) delibera, su proposta del Direttore/della Direttrice e sentito il Senato accademico, l'istituzione di centri di servizio e ne fissa le regole organizzative e di funzionamento;
- j) approva, sentiti i Consigli di Facoltà, i ruoli organici del personale docente e delibera, sentito il Senato accademico, i criteri per il loro trattamento economico;
- k) approva annualmente la proposta del/della Preside di reclutamento del personale docente nell'ambito dei ruoli organici approvati;
- l) approva i bandi per le procedure di reclutamento di professori/professoressa e dei ricercatori/delle ricercatrici senior conformemente ai regolamenti interni relativi alla procedura per la nomina in ruolo;
- m) delibera la nomina di professori/professoressa di ruolo e a tempo determinato nonché di ricercatori/ricercatrici senior, conformemente ai regolamenti interni relativi alla procedura per la nomina in ruolo;
- n) delibera la nomina del Rettore/della Rettrice, sentito il Senato accademico, nonché dei Prorettori/delle Prorettrici, su proposta dello/della stesso/a Rettore/Rettrice; nomina inoltre i Presidi/le Preside, eletti/e dai rispettivi Consigli di Facoltà;

Konventionen und Abkommen an den Präsidenten/die Präsidentin, den Universitätsdirektor/die Universitätsdirektorin oder den Rektor/die Rektorin delegieren;

- f) genehmigt nach Anhörung des Senats die Einrichtung und Schließung von akademischen Organisationseinheiten, Fakultäten, Zentren für Lehre und Forschung;
- g) genehmigt die Einrichtung und Aktivierung von Studiengängen und Weiterbildungsprogrammen;
- h) genehmigt die Einrichtung und Aktivierung von *Spin-off* und *Start-up* Unternehmen;
- i) beschließt auf Vorschlag des Universitätsdirektors/der Universitätsdirektorin und nach Anhörung des Senats die Einrichtung von Dienstleistungseinrichtungen und legt die Regeln für deren Organisation und Funktionsweise fest;
- j) genehmigt nach Anhörung der Fakultätsräte die Stellenpläne des Lehrpersonals und beschließt nach Anhörung des Senats die Kriterien für die Entlohnung;
- k) genehmigt jährlich den Vorschlag des Dekans/der Dekanin zur Berufung des Lehrpersonals im Rahmen der genehmigten Stellenpläne;
- l) genehmigt die Ausschreibungen von Auswahlverfahren der Professoren/Professorinnen und der Seniorforscher/Seniorforscherinnen gemäß den internen Regelungen für Berufungsverfahren;
- m) ernennt die Professoren/Professorinnen auf Planstelle und jene mit befristetem Vertrag sowie Seniorforscher/Seniorforscherinnen gemäß den internen Regelungen zu den Berufungsverfahren;
- n) ernennt nach Anhörung des Senats den Rektor/die Rektorin sowie die Prorektoren auf Vorschlag des Rektors/der Rektorin; ernennt die Dekane nach deren Wahl durch den jeweiligen Fakultätsrat;

- o) approva il contratto di lavoro del Rettore/della Rettrice fissando gli obiettivi che lo stesso/la stessa dovrà raggiungere;
- p) delibera la nomina del Direttore/della Direttrice su proposta del/della Presidente, e ne approva il contratto di lavoro;
- q) nomina su proposta della Commissione di ricerca due professori/professoressa di ruolo membri del Presidio di qualità;
- r) nomina su proposta della Commissione per gli studi due professori/professoressa di ruolo membri del Presidio di qualità;
- s) approva il regolamento per l'amministrazione, la finanza e la contabilità, il piano dell'organizzazione, nonché ogni altro regolamento che il presente statuto non demanda ad altri organi;
- t) approva, sentito il Senato accademico, il regolamento generale d'Ateneo, i regolamenti delle strutture organizzative accademiche e dei loro organi, delle Facoltà, dei centri per la didattica e la ricerca, nonché dei centri di servizio;
- u) approva, sentito il Senato accademico, il calendario accademico;
- v) delibera l'ammontare delle tasse di iscrizione, dei contributi e degli eventuali esoneri;
- w) determina, sentito la Commissione per gli studi, il numero massimo delle immatricolazioni per ciascun corso di studio;
- x) approva, su proposta del Direttore/della Direttrice, i ruoli organici del personale tecnico ed amministrativo, regolando il loro trattamento giuridico ed economico;
- y) approva, sentito il Senato accademico, e con una maggioranza dei due terzi dei membri, le modifiche al presente statuto;
- o) genehmigt den Arbeitsvertrag des Rektors/der Rektorin und bestimmt die von ihm/ihr zu erreichenden Ziele;
- p) ernennt den Universitätsdirektor/die Universitätsdirektorin auf Vorschlag des Präsidenten/der Präsidentin und genehmigt den entsprechenden Arbeitsvertrag;
- q) ernennt auf Vorschlag der Forschungskommission zwei Professoren/Professorinnen auf Planstelle als Mitglieder für das Qualitätspräsidium;
- r) ernennt auf Vorschlag der Studienkommission zwei Professoren/Professorinnen auf Planstelle als Mitglieder für das Qualitätspräsidium;
- s) genehmigt die Verwaltungs- und Finanzordnung, den Organisationsplan, sowie alle anderen Regelungen, die laut diesem Statut nicht anderen Gremien zur Beschlussfassung vorbehalten sind;
- t) genehmigt nach Anhörung des Senats die Allgemeine Geschäftsordnung, die Ordnungen der akademischen Organisationseinheiten und ihrer Gremien, der Fakultäten, der Zentren für Lehre und Forschung, sowie der Dienstleistungseinrichtungen;
- u) genehmigt nach Anhörung des Senats den akademischen Kalender;
- v) beschließt die Höhe der Studiengebühren, der Beiträge und allfällige Befreiungen;
- w) legt nach Anhörung der Studienkommission die Anzahl der Studienplätze der einzelnen Studiengänge fest;
- x) genehmigt auf Vorschlag des Universitätsdirektors/der Universitätsdirektorin die Stellenpläne des technischen Personals und des Verwaltungspersonals und regelt dessen rechtliche und wirtschaftliche Behandlung;
- y) genehmigt nach Anhörung des Senats mit einer Stimmenmehrheit von zwei Dritteln der Mitglieder Änderungen dieses Statuts;

- | | |
|---|---|
| <p>z) delibera l'accettazione di donazioni, eredit  e legati;</p> <p>aa) delibera, su proposta del Presidente/della Presidente, del Rettore/della Rettrice o del Senato accademico, il conferimento di onorificenze;</p> <p>bb) delibera su ogni altra questione di interesse per l'Universit  che il presente Statuto non demanda ad altri organi.</p> <p>3. Nei casi di conflitto di competenza tra organi decide il Consiglio dell'Universit .</p> <p>4. Il Consiglio dell'Universit  pu  costituire uno o pi  comitati, cui demandare la trattazione di specifici argomenti e pu  delegare determinate competenze al/alla Presidente, al/alla Vicepresidente, al Rettore/alla Rettrice, al Prorettore/alla Prorettrice o al Direttore/alla Direttrice.</p> <p>5. I membri del Consiglio dell'Universit  hanno il diritto di essere informati su tutte le questioni che riguardano l'Universit .</p> | <p>z) entscheidet  ber die Annahme von Schenkungen, Hinterlassenschaften und Verm chtnissen;</p> <p>aa) beschlie t, auf Vorschlag des Pr sidenten/der Pr sidentin, des Rektors/der Rektorin oder des Senats, die Erteilung von Ehrungen;</p> <p>bb) entscheidet  ber jede andere die Universit  betreffende Angelegenheit, die von diesem Statut nicht anderen Gremien vorbehalten ist.</p> <p>3. Bei Kompetenzstreitigkeiten zwischen Gremien entscheidet der Universit tsrat.</p> <p>4. Der Universit tsrat kann f r die Abwicklung bestimmter Gesch fte einen oder mehrere Aussch sse bilden und bestimmte Zust ndigkeiten an den Pr sidenten/die Pr sidentin, den Vizepr sidenten/die Vizepr sidentin, den Rektor/die Rektorin, den Prorektor/die Prorektorin oder an den Universit tsdirektor/die Universit tsdirektorin delegieren.</p> <p>5. Die Mitglieder des Universit tsrates haben das Recht,  ber alle die Universit  betreffenden Angelegenheiten informiert zu werden.</p> |
|---|---|

Art. 7 - Presidente

1. Il/la Presidente del Consiglio dell'Universit    il/la rappresentante legale dell'Universit . Esso/essa:
 - a) convoca e presiede il Consiglio dell'Universit ;
 - b) esegue le delibere del Consiglio dell'Universit , fatte salve le competenze attribuite al Rettore/alla Rettrice;
 - c) propone al Consiglio dell'Universit , sentito il Senato accademico, l'istituzione e la chiusura di unit  organizzative accademiche, facolt  e centri per la didattica e la ricerca;
 - d) propone al Consiglio dell'Universit , sentito il Rettore/la Rettrice l'istituzione di corsi di studio e cattedre convenzionate, nonch  il reclutamento di professori/professoressa, ricercatori/ricercatrici e di altro personale accademico;

Art. 7 - Pr sident/Pr sidentin

1. Der Pr sident/die Pr sidentin des Universit tsrates ist der Rechtsvertreter/die Rechtsvertreterin der Universit . Der Pr sident/die Pr sidentin:
 - a) beruft den Universit tsrat ein und f hrt dessen Vorsitz;
 - b) f hrt die Beschl sse des Universit tsrates mit Ausnahme der Zust ndigkeiten des Rektors/der Rektorin aus;
 - c) sch gt nach Anh rung des Senats dem Universit tsrat die Einrichtung und Schlie ung von akademischen Organisationseinheiten, Fakult ten und Zentren f r Lehre und Forschung vor;
 - d) sch gt nach Anh rung des Rektors/der Rektorin die Einrichtung von Studieng ngen und Stiftungslehrst hlen sowie die Berufung von Professor/innen, Forscher/innen und anderem Lehrpersonal vor;

- | | |
|--|--|
| <p>e) stipula unitamente al Rettore/alla Rettrice e al Direttore/alla Direttrice le convenzioni programmatico-finanziarie con la Provincia Autonoma di Bolzano concernenti gli obiettivi che l'Universit  intende raggiungere;</p> <p>f) sottoscrive le convenzioni approvate dal Consiglio dell'Universit ;</p> <p>g) emana lo Statuto, il regolamento didattico generale dell'Universit , il regolamento generale d'Ateneo, il regolamento per l'amministrazione, la finanza e la contabilit ;</p> <p>h) adotta, in caso di necessit  e di urgenza, i provvedimenti di competenza del Consiglio dell'Universit , salvo ratifica nella prima seduta immediatamente successiva;</p> <p>i) decide il rinvio delle delibere di altri organi nel caso in cui siano in contrasto alla legge, ai regolamenti, allo Statuto o alle delibere del Consiglio dell'Universit . Quest'ultimo deve essere informato nei casi pi  gravi;</p> <p>j) nomina in accordo con il Rettore/la Rettrice il coordinatore/la coordinatrice del Presidio di qualit ;</p> <p>k) decide sulla possibilit  per l'Universit  di agire o resistere in giudizio nei casi di contenzioso;</p> <p>l) esercita tutte le altre funzioni attribuitegli/le dallo Statuto e che spettano per legge al/alla legale rappresentante dell'Universit .</p> | <p>e) schlie t zusammen mit dem Rektor/der Rektorin und dem Universit tsdirektor/der Universit tsdirektorin die Leistungsvereinbarungen mit der Autonomen Provinz Bozen ab;</p> <p>f) unterzeichnet Konventionen, die vom Universit tsrat genehmigt worden sind;</p> <p>g) erl sst das Statut, die Allgemeine Studienordnung der Universit t, die Allgemeine Gesch ftsordnung und die Verwaltungs- und Finanzordnung;</p> <p>h) erl sst, falls notwendig und dringlich, Verordnungen aus dem Zust ndigkeitsbereich des Universit tsrates, welche von diesem in der darauffolgenden Sitzung zu ratifizieren sind;</p> <p>i) entscheidet  ber die R ckverweisung von Beschl ssen anderer Gremien, sofern sie im Widerspruch zu Gesetzen, Verordnungen, zum Statut oder zu den Beschl ssen des Universit tsrates stehen. Der Universit tsrat ist in schwerwiegenden F llen dar ber zu informieren;</p> <p>j) ernennt in Absprache mit dem Rektor/der Rektorin den Koordinator/die Koordinatorin des Qualit tspr sidiums;</p> <p>k) entscheidet  ber die aktive oder passive gerichtliche Streiteinlassung der Universit t;</p> <p>l) nimmt s mtliche andere Funktionen wahr, die ihm/ihr vom Statut  bertragen sind und die von Gesetzes wegen dem/der gesetzlichen Vertreter/Vertreterin der Universit t zustehen.</p> |
|--|--|
-
- | | |
|--|---|
| <p>2. Il/la Presidente pu  delegare competenze e l'adozione di atti giuridici.</p> <p>3. Il Consiglio dell'Universit  pu  conferire la nomina a vita di presidenti onorari/onorarie, scegliendo fra quei/quelle presidenti cessati/e dalle loro funzioni che si siano particolarmente distinti/e a favore dell'Universit .</p> | <p>2. Der Pr sident/die Pr sidentin kann Kompetenzen und die Durchf hrung von Rechtshandlungen delegieren.</p> <p>3. Der Universit tsrat kann aus dem Kreise der ehemaligen Pr sidenten/Pr sidentinnen Ehrenpr sidenten/Ehrenpr sidentinnen auf Lebenszeit ernennen, die sich um die Universit  besonders verdient gemacht haben.</p> |
|--|---|

Art. 8 - Senato accademico

1. Il Senato accademico   composto da:
 - a) il Rettore/la Rettrice;
 - b) i/le due Prorettori/Prorettrici;
 - c) i/le Presidi delle Facolt ;
 - d) due rappresentanti degli studenti/delle studentesse scelti/e secondo il Regolamento elezioni.
2. Il Rettore/la Rettrice pu  nominare tra i professori/le professoresse di prima fascia dell'Universit , fino a tre delegati/delegate.
3. I delegati/le delegate del Rettore/della Rettrice e il Direttore/la Direttrice partecipano con diritto di voto consultivo alle sedute del Senato accademico.
4. Il Senato accademico:
 - a) approva, sentito la Commissione per gli studi, il regolamento didattico generale e i regolamenti dei corsi di studio;
 - b) approva, nel rispetto delle direttive generali di sviluppo approvate dal Consiglio dell'Universit  nonch  nel rispetto del bilancio annuale e pluriennale dell'Universit , la stipula di convenzioni aventi ad oggetto la didattica e la ricerca, facendo salve le competenze esclusive del Consiglio dell'Universit ;
 - c) si esprime in merito al programma annuale delle attivit  sia per la didattica che per la ricerca, sentita la Commissione di ricerca per l'ambito della ricerca e la Commissione per gli studi, per l'ambito della didattica; esprime un parere in merito alla relazione annuale sulla gestione;
 - d) esprime parere in merito alla nomina del Rettore/della Rettrice; si esprime altres  in merito alla nomina di professori/professoressse, incluse le posizioni di professori straordinari/professoressse straordinarie a tempo determinato e di ricercatori/ricercatrici, ed esercita le attribuzioni conformemente ai regolamenti interni della procedura per la nomina in ruolo;

Art. 8 - Senat

1. Der Senat setzt sich zusammen aus:
 - a) dem Rektor/der Rektorin;
 - b) den zwei Prorektoren/Prorektorinnen;
 - c) den Dekanen/Dekaninnen der Fakult ten;
 - d) zwei gem   Wahlordnung gew hlten Vertretern/Vertreterinnen der Studierenden.
2. Der Rektor/die Rektorin kann aus den Reihen der Professoren/Professorinnen der ersten Ebene der Universit  bis zu drei Delegierte ernennen.
3. Die Delegierten des Rektors/der Rektorin und der Universit tsdirektor/die Universit tsdirektorin nehmen an den Sitzungen des Senates mit beratender Stimme teil.
4. Der Senat:
 - a) genehmigt nach Anh rung der Studienkommission die Allgemeine Studienordnung und die Studiengangsregelungen der Studieng nge;
 - b) genehmigt im Rahmen der vom Universit tsrat verabschiedeten Allgemeinen Richtlinien der Universit tsentwicklung und des j hrlichen und mehrj hrigen Haushaltes den Abschluss von Abkommen, welche die Lehre und Forschung betreffen und nicht in die ausschlie liche Zust ndigkeit des Universit tsrates fallen;
 - c) begutachtet das Jahrest tigkeitsprogramm in Lehre und Forschung nach Anh rung der Forschungskommission im Bereich Forschung und der Studienkommission im Bereich Lehre; erteilt ein Gutachten zum Jahresabschlussbericht;
 - d) erteilt Gutachten bez glich der Ernennung des Rektors/der Rektorin und begutachtet die Ernennung der Professoren/Professorinnen sowie der Stiftungsprofessoren/Stiftungsprofessorinnen und Forscher/Forscherinnen und  bt die Zust ndigkeiten gem   der internen Regelung zu den Berufungsverfahren;

- | | |
|--|--|
| <p>e) esprime parere in merito all'istituzione e la chiusura di strutture organizzative accademiche, Facolt  e centri per la didattica e la ricerca;</p> <p>f) esprime parere in merito al regolamento generale di Ateneo, al regolamento delle unit  organizzative accademiche e dei loro organi, in modo particolare a quello di Facolt , dei centri per la didattica e la ricerca, nonch  al regolamento dei centri di servizio;</p> <p>g) esprime parere in merito ad eventuali modifiche al presente Statuto;</p> <p>h) esprime parere in merito ai regolamenti che disciplinano il trattamento giuridico del personale docente e ai criteri per il loro trattamento economico;</p> <p>i) esprime parere in merito al calendario accademico.</p> <p>5. Il Senato accademico ha la facolt  di delegare l'approvazione di determinate convenzioni.</p> <p>6. Ove il Consiglio dell'Universit  richieda, per le sue specifiche delibere, l'acquisizione di proposte e/o pareri, a cui si dovr  provvedere entro 60 giorni dalla loro richiesta; decorso infruttuosamente tale termine, il Consiglio dell'Universit  potr  deliberare anche in assenza degli stessi.</p> <p>7. Il Senato accademico pu  costituire commissioni a cui delegare la trattazione di specifiche questioni di sua competenza.</p> | <p>e) erilit Gutachten zur Einrichtung und Schlie ung von akademischen Organisationseinheiten, Fakult ten und Zentren f r Lehre und Forschung;</p> <p>f) erilit Gutachten zur Allgemeinen Gesch ftsordnung, der Ordnungen der akademischen Organisationseinheiten und ihrer Gremien, insbesondere der Fakult ten, der Zentren f r Lehre und Forschung, sowie der Dienstleistungseinrichtungen;</p> <p>g) erilit Gutachten bez glich der Ab nderungen am vorliegenden Statut;</p> <p>h) erilit Gutachten bez glich der Regelungen, welche die rechtliche Behandlung, sowie die Entlohnungskriterien des Lehrpersonals betreffen;</p> <p>i) erilit Gutachten bez glich des Akademischen Kalenders.</p> <p>5. Der Senat kann die Genehmigung bestimmter Konventionen delegieren.</p> <p>6. Falls der Universit tsrat f r die Beschlussfassung Gutachten und/oder Vorschl ge anfordert, sind diese innerhalb von 60 Tagen ab deren Beantragung zu erbringen; nach Ablauf dieser Frist kann der Universit tsrat die Beschlussfassung auch ohne diese vornehmen.</p> <p>7. Der Senat kann Kommissionen einrichten, an die er die Behandlung bestimmter Angelegenheiten seiner Zust ndigkeit delegiert.</p> |
|--|--|

Art. 9 - Rettore/Rettrice

1. Il Rettore/la Rettrice   nominato/a dal Consiglio dell'Universit , sentito il Senato accademico, scelto/a tra professori/professoressesse universitari/e di riconosciuto valore scientifico internazionale. Resta in carica per un quadriennio accademico e pu  essere confermato/a una sola volta.
2. Il Rettore/la Rettrice:
 - a) convoca e presiede il Senato accademico e provvede all'esecuzione delle sue delibere, fatta salva l'esecuzione di quelle delibere del Senato accademico che sono riservate al/alla Presidente del Consiglio dell'Universit ;

Art. 9 - Rektor/Rektorin

1. Zum Rektor/zur Rektorin wird nach Anh rung des Senates vom Universit tsrat ein Universit tsprofessor/eine Universit tsprofessorin von international anerkanntem wissenschaftlichen Rang ernannt. Er/Sie bleibt vier akademische Jahre im Amt und kann nur einmal best tigt werden.
2. Der Rektor/die Rektorin:
 - a) beruft den Senat ein, f hrt dessen Vorsitz und sorgt f r die Ausf hrung von dessen Beschl ssen, unbeschadet der Ausf hrung jener Beschl sse des Senats, die dem Pr sidenten/der Pr sidentin des Universit tsrats vorbehalten sind;

- b) riferisce al Consiglio dell'Universit , in occasione della relazione sulla gestione, sugli obiettivi raggiunti dall'Universit  nella didattica e nella ricerca;
- c) nelle materie di sua competenza, cura l'osservanza delle leggi, delle norme concernenti l'ordinamento universitario e delle linee guida in materia scientifica e didattica; rinvia le decisioni di altri organi, nel caso di contrariet  alla legge, ai regolamenti, allo Statuto o alle delibere del Senato accademico. Quest'ultimo deve essere informato nei casi pi  gravi;
- d) propone convenzioni ai sensi dell'art. 29, comma 2, con altre Universit , centri di ricerca, nonch  istituzioni culturali e scientifiche;
- e) propone al Consiglio dell'Universit , sentito il Senato accademico, l'istituzione e la chiusura di unit  organizzative accademiche e centri per la didattica e la ricerca;
- f) avvia, secondo le disposizioni vigenti, i procedimenti disciplinari nei confronti del personale accademico e degli studenti/delle studentesse e adotta nei confronti di questi ultimi/di queste ultime eventuali provvedimenti disciplinari;
- g) approva il conferimento di premi in riferimento a didattica e ricerca;
- h) rappresenta l'Universit  in occasione di cerimonie accademiche e culturali e nel conferimento dei titoli accademici;
- i) sottoscrive i contratti di lavoro del personale accademico;
- j) sottoscrive le convenzioni che sono state approvate dal Senato accademico;
- k) stipula, unitamente al/alla Presidente del Consiglio dell'Universit  e al Direttore/alla Direttrice, convenzioni programmatico-finanziarie con la Provincia Autonoma di Bolzano concernenti gli obiettivi che l'Universit  si impegna a raggiungere;
- b) berichtet dem Universit tsrat anl sslich des Jahresabschlussberichtes  ber die von der Universit  erreichten Ziele in Lehre und Forschung;
- c) sorgt in seinem/ihrer Zust ndigkeitsbereich f r die Einhaltung der Gesetze, der Bestimmungen der Universit tsordnung und der Leitlinien im Bereich der Forschung und Lehre; kann Entscheidungen anderer Gremien zur ckverweisen, wenn sie im Widerspruch zu Gesetzen, Verordnungen, zum Statut oder zu den Beschl ssen des Senates stehen. Dieser ist in schwerwiegenden F llen zu informieren;
- d) schl gt Vereinbarungen mit anderen Universit ten, Forschungseinrichtungen und kulturellen und wissenschaftlichen Einrichtungen gem   Art. 29 Abs. 2 vor;
- e) schl gt nach Anh rung des Senates dem Universit tsrat die Einrichtung und Schlie ung von akademischen Organisationseinheiten und Zentren f r Lehre und Forschung vor;
- f) leitet Disziplinarverfahren gegen ber dem Lehrpersonal und den Studierenden ein und ergreift gegen ber den letztgenannten Disziplinarma nahmen gem   den geltenden Bestimmungen;
- g) genehmigt die Zuerkennung von Preisen und Pr mien in Bezug auf Lehre und Forschung;
- h) vertritt die Universit  bei akademischen und kulturellen Veranstaltungen und bei der Verleihung von akademischen Studientiteln;
- i) unterzeichnet die Arbeitsvertr ge des Lehrpersonals;
- j) unterzeichnet Konventionen, die vom Senat genehmigt worden sind;
- k) schlie t gemeinsam mit dem Pr sidenten/der Pr sidentin des Universit tsrates und dem Universit tsdirektor/der Universit tsdirektorin die Leistungsvereinbarungen mit der Autonomen Provinz Bozen ab;

- l) stipula con i/le Presidi delle Facolt , con i Direttori/Direttrici dei centri di ricerca o di altre strutture organizzative accademiche gli accordi sugli obiettivi da raggiungere;
 - m) adotta, in caso di necessit  e di urgenza, gli atti di competenza del Senato accademico salvo ratifica nella prima seduta immediatamente successiva.
 - n) esercita tutte le altre funzioni ad esso/essa attribuite dalla legge, fatta salva la competenza degli altri organi previsti dal presente Statuto.
3. Su proposta del Rettore/della Rettrice, il Consiglio dell'Universit  nomina fino a due Prorettori/Prorettrici, scelti/e tra professori/professoressa di prima fascia appartenenti preferibilmente ad una Facolt  diversa da quella del Rettore/della Rettrice che rimarranno in carica quattro anni. I Prorettori/le Prorettrici sono chiamati/e a sostituire il Rettore/la Rettrice in caso di sua assenza o impedimento.
 4. Il Rettore/la Rettrice ha la facolt  di delegare competenze e l'adozione di atti giuridici.
- l) schlie t mit den Dekanen/Dekaninnen der Fakult ten, den Direktoren/Direktorinnen der Zentren f r Forschung oder anderen akademischen Organisationseinheiten Zielvereinbarungen ab;
 - m) erl sst, falls notwendig und dringlich, Verf gungen aus dem Zust ndigkeitsbereich des Senats, die von diesem in der n chsten Sitzung ratifiziert werden m ssen;
 - n)  bt, vorbehaltlich der im Statut vorgesehen Zust ndigkeiten der anderen Gremien, alle anderen Funktionen aus, die ihm/ihr vom Gesetz  bertragen sind.
3. Auf Vorschlag des Rektors/der Rektorin ernennt der Universit tsrat bis zu zwei Prorektoren/ Prorektorinnen aus dem Kreise der Professoren/Professorinnen erster Ebene, die vorzugsweise einer anderen Fakult  angeh ren als die des Rektors/der Rektorin. Die Amtsdauer betr gt vier Jahre. Die Prorektoren/Prorektorinnen vertreten den Rektor/die Rektorin im Falle seiner/ihrer Abwesenheit oder Verhinderung.
 4. Der Rektor/die Rektorin kann Kompetenzen sowie die Durchf hrung von Rechtshandlungen delegieren.

Art. 10 - Direttore/Direttrice

1. La direzione della struttura amministrativa compete al Direttore/alla Direttrice. L'incarico di Direttore/Direttrice   attribuito dal Consiglio dell'Universit  a persona qualificata, scelta attraverso una procedura di selezione. Il Direttore/la Direttrice risponde direttamente al/alla Presidente. L'incarico ha durata quinquennale e pu  essere rinnovato. Il Direttore/la Direttrice pu  nominare un Vicedirettore/una Vicedirettrice.
2. Il Direttore/la Direttrice:
 - a) adotta i provvedimenti per l'organizzazione degli uffici;

Art. 10 - Universit tsdirektor/ Universit tsdirektorin

1. Der Universit tsdirektor/die Universit tsdirektorin ist der Leiter/die Leiterin der Verwaltung. Die Funktion des Universit tsdirektors/der Universit tsdirektorin  bertr gt der Universit tsrat an qualifizierte Personen, die durch ein Auswahlverfahren ermittelt werden. Der Universit tsdirektor/die Universit tsdirektorin ist dem Pr sidenten/der Pr sidentin direkt unterstellt. Der Auftrag hat eine Dauer von f nf Jahren und kann erneuert werden. Der Universit tsdirektor/die Universit tsdirektorin kann einen Vizedirektor/eine Vizedirektorin ernennen.
2. Der Universit tsdirektor/die Universit tsdirektorin:
 - a) trifft die Ma nahmen f r die Organisation der Dienststellen;

- | | |
|---|---|
| <p>b) è amministrativamente responsabile dei centri di servizio che gli/le sono assegnati. Dirige e coordina il relativo personale tecnico ed amministrativo dei centri di servizio a lui/lei sottoposti;</p> <p>c) esplica una attività generale di indirizzo e direzione volta al raggiungimento degli obiettivi generali di sviluppo e del programma annuale delle attività;</p> <p>d) sottoscrive i contratti di lavoro del personale tecnico ed amministrativo;</p> <p>e) formula proposte al Consiglio dell'Università anche ai fini della elaborazione di programmi, di direttive e di progetti di competenza degli organi di governo e ne cura l'attuazione;</p> <p>f) garantisce le funzioni che la normativa universitaria attribuisce al Direttore amministrativo/alla Direttrice amministrativa a nonché al Direttore/alla Direttrice generale;</p> <p>g) opera, inoltre, sulla base di specifiche deleghe, conferite dal Consiglio dell'Università;</p> <p>h) può partecipare, con diritto di voto consultivo, personalmente o a mezzo di un delegato/una delegata alle sedute del Consiglio dell'Università, a quelle del Senato accademico, della Commissione di ricerca, della Commissione per gli studi e del Presidio di qualità;</p> <p>i) propone al Consiglio dell'Università il numero e la tipologia di strutture organizzative utili al regolare svolgimento dell'attività amministrativa nonché gli ambiti di competenza delle stesse per il piano dell'organizzazione;</p> <p>j) propone al Consiglio dell'Università l'istituzione di centri di servizio e la disciplina per la loro organizzazione e funzionamento;</p> | <p>b) ist amministrativ für die ihm/ihr zugewiesenen Dienstleistungseinrichtungen verantwortlich. Er/sie leitet und führt das ihm/ihr zugewiesene technische Personal und das Verwaltungspersonal der ihm/ihr unterstellten Dienstleistungseinrichtungen;</p> <p>c) er/sie übt in Hinblick auf die Erreichung der allgemeinen Entwicklungsziele und jener des Jahrestätigkeitsprogrammes eine allgemeine Weisungs- und Lenkungsbefugnis aus;</p> <p>d) schließt die Arbeitsverträge mit dem technischen Personal und dem Verwaltungspersonal ab;</p> <p>e) unterbreitet dem Universitätsrat Vorschläge auch hinsichtlich der Ausarbeitung von Programmen, Richtlinien und Projekten, die Zuständigkeit der Leitungsgremien sind und sorgt für deren Ausführung;</p> <p>f) übt die dem Verwaltungsdirektor/der Verwaltungsdirektorin sowie dem Generaldirektor/der Generaldirektorin von der Universitätsgesetzgebung zugewiesenen Aufgaben aus;</p> <p>g) handelt außerdem aufgrund der vom Universitätsrat erteilten Sondervollmachten;</p> <p>h) kann mit beratender Stimme, auch mittels eines Bevollmächtigten/einer Bevollmächtigten, an den Sitzungen des Universitätsrates, des Senats, der Forschungskommission, der Studienkommission und des Qualitätspräsidiums, teilnehmen;</p> <p>i) schlägt dem Universitätsrat die Anzahl und die Art der für den reibungslosen Ablauf der Verwaltungstätigkeit erforderlichen Organisationseinheiten sowie deren Aufgabenbereiche im Hinblick auf den Organisationsplan vor;</p> <p>j) schlägt dem Universitätsrat die Einrichtung von Dienstleistungseinrichtungen und die Regeln für deren Organisation und Funktionsweise vor;</p> |
|---|---|

k) stipula unitamente al/alla Presidente e al Rettore/alla Rettrice gli accordi con la Provincia Autonoma di Bolzano concernenti gli obiettivi che l'Università deve raggiungere.

k) schließt zusammen mit dem Präsidenten/der Präsidentin und dem Rektor/der Rektorin die Zielvereinbarungen mit der Autonomen Provinz Bozen ab.

ORGANI CENTRALI DELL'ATENEO

ZENTRALE AKADEMISCHE GREMIEN

Art. 11 - Commissione di ricerca

Art. 11 - Forschungskommission

1. La Commissione di ricerca è composta da:
 - a) il Rettore/la Rettrice o dal Prorettore delegato/dalla Prorettrice delegata, da cui la commissione stessa è presieduta;
 - b) un membro esterno di fama internazionale per ogni Facoltà che viene nominato dal Rettore/dalla Rettrice, scelto tra una rosa di tre candidati/e proposti/e da ogni Consiglio di Facoltà per la durata di 3 anni;
 - c) il/la Vicepreside cui compete la coordinazione della ricerca per ogni Facoltà;
 - d) il/la responsabile dei singoli centri per la ricerca.
 2. Il Direttore/la Direttrice, un/a responsabile di un'unità organizzativa da lui/lei nominato/a e il/la responsabile della biblioteca partecipano alle sedute della Commissione di ricerca con diritto di voto consultivo.
 3. La Commissione di ricerca:
 - a) assume il compito della pianificazione e del coordinamento a livello d'ateneo della ricerca;
 - b) propone al Consiglio dell'Università le risorse destinabili alla ricerca nei limiti stabiliti dal bilancio di previsione approvato;
 - c) delibera nell'ambito dell'indirizzo generale di sviluppo dell'Università i criteri per l'assegnazione delle risorse finanziarie destinate alla ricerca previste dal bilancio di previsione;
1. Die Forschungskommission besteht aus:
 - a) dem Rektor/der Rektorin oder dem/der bevollmächtigten Prorektor/Prorektorin, der/die den Vorsitz führt;
 - b) einem externen Mitglied von internationalem Ruf pro Fakultät für die Amtsdauer von 3 Jahren, welches der Rektor/die Rektorin aus einem Dreier-vorschlag ernennt, der ihm/ihr von jedem Fakultätsrat unterbreitet wird;
 - c) dem/der für die Koordination der Forschung zuständigen Prodekan/Prodekanin der einzelnen Fakultäten;
 - d) dem Leiter/der Leiterin der einzelnen Zentren für Forschung
 2. Der Universitätsdirektor/die Universitätsdirektorin sowie ein/eine von ihm/ihr ernannte/r Leiter/Leiterin einer Organisationseinheit und der Leiter/die Leiterin der Bibliothek nehmen an den Sitzungen der Forschungskommission mit beratender Stimme teil.
 3. Die Forschungskommission:
 - a) übernimmt die gesamtuniversitäre Planung und Abstimmung im Bereich der Forschung;
 - b) schlägt dem Universitätsrat im Rahmen der Genehmigung des Haushaltsvoranschlags den finanziellen Rahmen für die Forschung vor;
 - c) legt im Rahmen der allgemeinen Ausrichtung der Universitätsentwicklung die Kriterien für die Zuweisung der im Haushaltsvoranschlag vorgesehenen Forschungsmittel fest;

- | | |
|---|--|
| <p>d) formula un parere in merito al programma annuale delle attività di ricerca;</p> <p>e) propone al Consiglio dell'Università due professori/esse di ruolo quali membri del Presidio di qualità, uno/a dei/delle quali appartenenti all'area scientifica, l'altro/a a quella umanistica.</p> <p>4. Il regolamento di funzionamento della Commissione di ricerca è approvato dal Consiglio dell'Università, sentito il Senato accademico.</p> | <p>d) erstellt ein Gutachten über das Jahrestätigkeitsprogramm im Bereich der Forschung;</p> <p>e) schlägt dem Universitätsrat zwei Professoren/Professorinnen auf Planstelle als Mitglieder für das Qualitätspräsidium vor, davon eines aus dem naturwissenschaftlichen Bereich und eines aus dem geisteswissenschaftlichen Bereich.</p> <p>4. Die Geschäftsordnung der Forschungskommission wird vom Universitätsrat nach Anhörung des Senats genehmigt.</p> |
|---|--|

Art. 12 - Commissione per gli studi

1. La Commissione per gli studi è composta da:
 - a) il Rettore/la Rettrice o dal Prorettore/dalla Prorettrice delegato/a che presiede lo stesso organo;
 - b) il/la Vicepresidente competente per il coordinamento della didattica di ogni singola Facoltà;
 - c) il/la Rappresentante degli studenti/delle studentesse nominato/a dalla Consulta degli studenti tra i suoi componenti secondo il Regolamento elezioni.
2. La Commissione per gli studi può invitare su temi specifici esperti di fama internazionale a fini consultativi.
3. Il Direttore/la Direttrice, un/a responsabile di un'unità organizzativa da lui/lei nominato/a e il/la responsabile del Centro linguistico partecipano alle sedute della Commissione per gli studi, con diritto di voto consultivo.
4. La Commissione per gli studi:
 - a) assume il compito della pianificazione e del coordinamento a livello d'ateneo nel settore della didattica;
 - b) esprime un parere in merito al regolamento didattico generale e ai regolamenti dei corsi di studio;
 - c) formula un parere in merito a nuovi corsi di studio;

Art. 12 - Studienkommission

1. Die Studienkommission besteht aus:
 - a) dem Rektor/der Rektorin oder dem/der Bevollmächtigten Prorektor/Prorektorin welcher/welche den Vorsitz führt;
 - b) dem/der für die Koordination der Lehre zuständigen Prodekan/Prodekanin der einzelnen Fakultäten;
 - c) dem Studentenvertreter/der Studentenvertreterin, welcher/welche vom Studierendenbeirat aus den Reihen ihrer Mitglieder gemäß Wahlordnung ernannt wird;
2. Die Studienkommission kann Experten von internationalem Ruf zu spezifischen Themen zur Beratung hinzuziehen.
3. An den Sitzungen der Studienkommission nehmen mit beratender Stimme der Universitätsdirektor/die Universitätsdirektorin sowie ein/eine von ihm/ihr ernannte/r Leiter/Leiterin einer Organisationseinheit und der Leiter/die Leiterin des Sprachenzentrums teil.
4. Die Studienkommission:
 - a) übernimmt die gesamtuniversitäre Planung und Abstimmung im Bereich der Lehre;
 - b) erstellt ein Gutachten über die Allgemeine Studienordnung und die Studiengangsregelungen der Studiengänge;
 - c) erstellt ein Gutachten über neue Studiengänge;

- | | |
|---|---|
| <p>d) propone al Consiglio dell'Università, in sede di programmazione universitaria, i criteri per l'assegnazione delle risorse destinabili alla didattica;</p> <p>e) formula un parere in merito al programma annuale delle attività nell'ambito della didattica;</p> <p>f) propone al Consiglio dell'Università due professori/professoressa di ruolo membri del Presidio di qualità, uno/a dei/delle quali appartenente all'area scientifica, l'altro/a a quella umanistica.</p> | <p>d) schlägt dem Universitätsrat vor Beginn der Haushaltsplanung die Kriterien für die Zuweisung der finanziellen Mittel für die Lehre vor;</p> <p>e) erstellt ein Gutachten über das Jahrestätigkeitsprogramm im Bereich der Lehre;</p> <p>f) schlägt dem Universitätsrat zwei Professoren/Professorinnen auf Planstelle als Mitglieder des Qualitätspräsidiums vor, davon eines aus dem naturwissenschaftlichen Bereich und eines aus dem geisteswissenschaftlichen Bereich.</p> |
|---|---|
5. Il regolamento della Commissione per gli studi viene approvato dal Consiglio dell'Università, una volta sentito il Senato accademico.
5. Die Geschäftsordnung der Studienkommission wird vom Universitätsrat nach Anhörung des Senats genehmigt.

Art. 13 - Presidio di qualità

1. Il Presidio di qualità è composto da:
 - a) il coordinatore/la coordinatrice che presiede lo stesso organo, nominato/a dal/dalla Presidente in accordo con il Rettore/la Rettrice;
 - b) due professori/professoressa nominati/e dal Consiglio dell'Università su proposta della Commissione per gli studi;
 - c) due professori/professoressa nominati/e dal Consiglio dell'Università su proposta della Commissione di ricerca;
 - d) il/la rappresentante degli studenti/delle studentesse scelto/a dalla Consulta degli studenti tra i suoi membri secondo il Regolamento elezioni.
2. Il Direttore/la Direttrice e il/la responsabile della qualità dei servizi partecipano alle sedute del Presidio di qualità, con diritto di voto consultivo.
3. Il Presidio di qualità assolve i compiti previsti dalle disposizioni di legge e finalizzati alla garanzia di qualità nell'ambito della didattica e della ricerca e ne coordina i processi interni per l'assicurazione della qualità dell'Università.

Art. 13 - Qualitätspräsidium

1. Das Qualitätspräsidium besteht aus:
 - a) dem Koordinator/der Koordinatorin, der/die den Vorsitz führt und vom Präsidenten/von der Präsidentin in Absprache mit dem Rektor/der Rektorin ernannt wird;
 - b) zwei vom Universitätsrat auf Vorschlag der Studienkommission ernannten Professoren/Professorinnen;
 - c) zwei vom Universitätsrat auf Vorschlag der Forschungskommission ernannten Professoren/Professorinnen;
 - d) dem Studentenvertreter/der Studentenvertreterin, welcher/welche vom Studierendenbeirat aus den Reihen seiner Mitglieder gemäß Wahlordnung ernannt wird.
2. An den Sitzungen des Qualitätspräsidiums nehmen der Universitätsdirektor/die Universitätsdirektorin und der/die Verantwortliche für die Qualitätsentwicklung mit beratender Stimme teil.
3. Das Qualitätspräsidium erfüllt die von den gesetzlichen Bestimmungen vorgesehenen Aufgaben zur Qualitätssicherung im Bereich der Lehre und Forschung und koordiniert alle Abläufe zur Qualitätssicherung an der Universität.

ORGANI DELLE STRUTTURE ACCADEMICHE

Art. 14 - Facoltà e organi

1. La Facoltà è la struttura accademica cui è attribuita la responsabilità per le attività didattiche e di ricerca.
Il personale accademico di ruolo è incardinato in una delle facoltà.
2. Gli organi delle Facoltà sono il/la Preside, il Consiglio di Facoltà, il Direttore/la Direttrice del corso di studio, il Consiglio del corso di studio nonché la Commissione didattica paritetica.
3. Per ogni facoltà può essere istituito un mentoring group scientifico. La composizione e le attribuzioni sono indicate in un regolamento, approvato dal Consiglio dell'Università.

Art. 15 - Preside

1. Il/la Preside è eletto/a da tutti/e i/le componenti del rispettivo Consiglio di Facoltà tra i professori/le professoresse a tempo pieno di prima fascia di ruolo e viene nominato/a dal Consiglio dell'Università. Esso/essa resta in carica per un triennio accademico e può essere confermato/a una sola volta.
2. Esso/essa rappresenta la Facoltà, convoca e presiede il Consiglio di Facoltà. Cura l'attuazione delle delibere del Consiglio di Facoltà, vigila sulle attività didattiche e di ricerca, nomina le commissioni di esame di profitto e sottoscrive gli incarichi di docenza a contratto.
3. Il/la Preside stipula con il Direttore/la Direttrice del corso di studio ed i/le responsabili d'area di ricerca, responsabile ciascuno/a del rispettivo ambito di ricerca, gli accordi concernenti gli obiettivi da conseguire.

GREMIEN DER AKADEMISCHEN STRUKTUREN

Art. 14 - Fakultäten und deren Gremien

1. Die Fakultät ist die akademische Struktur, welche für Lehre und Forschung verantwortlich ist.
Das akademische Lehrpersonal auf Planstelle ist einer Fakultät zugeordnet.
2. Die Gremien der Fakultäten sind der Dekan/die Dekanin, der Fakultätsrat, der Studiengangsleiter/die Studiengangsleiterinnen, der Studiengangsrat sowie die Paritätisch-Didaktische Kommission.
3. An jeder Fakultät kann eine wissenschaftliche Mentoring Group eingerichtet werden. Die Zusammensetzung und Befugnisse sind in einer Regelung festgelegt, welche vom Universitätsrat genehmigt wird.

Art. 15 - Dekan/Dekanin

1. Der Dekan/die Dekanin wird von allen Mitgliedern des jeweiligen Fakultätsrates aus den Reihen der Professoren/Professorinnen mit Vollzeitprofessur erster Ebene auf Planstelle gewählt und vom Universitätsrat ernannt. Er/sie bleibt drei akademische Jahre im Amt und kann nur einmal bestätigt werden.
2. Er/sie vertritt die Fakultät, beruft den Fakultätsrat ein und führt dessen Vorsitz. Er/sie sorgt für die Ausführung seiner Beschlüsse, wacht über die Tätigkeiten in Lehre und Forschung, ernennt die Prüfungskommissionen und unterzeichnet die Verträge der Lehrbeauftragten.
3. Der Dekan/die Dekanin schließt mit den Studiengangsleitern/Studiengangsleiterinnen und den Forschungssprechern/Forschungssprecherinnen, die je für einen Forschungsschwerpunkt verantwortlich sind, die Zielvereinbarungen ab.

4. Il/la Preside provvede alla programmazione ed alla destinazione delle risorse a disposizione, conformemente alle indicazioni del Senato accademico e alle decisioni del Consiglio dell'Università e del Consiglio di facoltà.
5. Il/la Preside definisce, insieme ai Direttori/alle Direttrici del corso di studio e ai/alle responsabili d'area di ricerca, la relazione sugli obiettivi raggiunti della Facoltà sia nella didattica che nella ricerca.
6. Il/la Preside approva le graduatorie delle procedure di selezione degli incarichi di docenza nonché delle collaborazioni didattiche e di ricerca.
7. Il/la Preside, sentiti/e i/le Direttori/Direttrici dei corsi di studio e i/le responsabili d'area di ricerca formula al Consiglio dell'Università una proposta in merito all'assunzione di personale docente nei limiti dei ruoli in organico approvati.
8. Il/la Preside nomina due Vicepresidi, di cui uno/una responsabile del coordinamento della ricerca ed uno/una del coordinamento della didattica. Il/la Vicepreside per la didattica viene nominato/a tra i Direttori/le Direttrici dei corsi di studio. Almeno uno/a dei/delle due vicepresidi deve essere un professore/una professoressa di ruolo di prima fascia.

Uno/a dei/delle Vicepresidi, con qualifica di professore/professoressa di ruolo di prima fascia, rappresenta il/la Preside in caso di suo/a impedimento o assenza. Il/la Preside ha la facoltà di delegare ai/alle Vicepresidi i compiti che gli/le competono.
9. Il/la Preside adotta, in caso di necessità e di urgenza, gli atti di competenza del Consiglio di Facoltà salvo ratifica nella prima seduta immediatamente successiva.
4. Der Dekan/die Dekanin sorgt gemäß den Richtlinien des Senats und den Beschlüssen des Universitätsrates sowie des Fakultätsrates für die Planung und Zweckbindung der verfügbaren Mittel.
5. Der Dekan/die Dekanin erstellt gemeinsam mit den Studiengangsleitern/-leiterinnen und den Forschungssprechern/-sprecherinnen den Jahresabschlussbericht zu den von der Fakultät erreichten Zielen in Lehre und Forschung.
6. Der Dekan/die Dekanin genehmigt die Rangordnungen der Auswahlverfahren der Lehrbeauftragten sowie der didaktischen und wissenschaftlichen Mitarbeiter/Mitarbeiterinnen.
7. Der Dekan/die Dekanin erstellt nach Anhörung der Studiengangsleiter/-leiterinnen und der Forschungssprecher einen Vorschlag für den Universitätsrat zur Aufnahme des Lehrpersonals im Rahmen der genehmigten Stellenpläne.
8. Der Dekan/die Dekanin ernennt zwei Prodekane/Prodekaninnen, wobei einer/eine die Koordination der Forschung und einer/eine die Koordination der Lehre wahrnimmt; der Prodekan/die Prodekanin der Lehre wird aus den Reihen der Studiengangsleiter/-leiterinnen ernannt. Mindestens einer der beiden Prodekane/Prodekaninnen muss ein Professor/ eine Professorin erster Ebene sein.

Einer/eine der Prodekane/Prodekaninnen, Professor/Professorin der ersten Ebene, vertritt den Dekan/die Dekanin im Falle von Verhinderung oder Abwesenheit. Der Dekan/die Dekanin kann eigene Zuständigkeiten an die Prodekane/Prodekaninnen delegieren.
9. Der Dekan/die Dekanin erlässt, falls notwendig und dringlich, Verfügungen aus dem Zuständigkeitsbereich der Fakultät, welche vom Fakultätsrat in der darauffolgenden Sitzung ratifiziert werden müssen.

Art. 16 - Consiglio di Facoltà

1. Il Consiglio di Facoltà è composto da:
 - a) il/la Preside da cui il Consiglio è presieduto;
 - b) i professori/le professoresse di prima e di seconda fascia di ruolo e a tempo determinato ed i ricercatori/le ricercatrici di ruolo (DPR 382/1980);
 - c) due rappresentanti dei ricercatori/delle ricercatrici a tempo determinato (ai sensi dell'art. 24, comma 3, lettera a) e b) L. 240/2010) eletti/e sulla base del Regolamento elezioni di cui, ove possibile, uno tra i ricercatori/le ricercatrici senior ed uno/a tra i ricercatori/le ricercatrici junior.
 - d) due rappresentanti degli studenti/delle studentesse eletti/e sulla base del Regolamento elezioni;
2. Alle sedute del Consiglio di Facoltà partecipa, con diritto di voto consultivo, il/la responsabile della Segreteria di facoltà.
3. Il Consiglio di Facoltà:
 - a) propone il programma delle attività unitamente al bilancio di previsione nonché i piani pluriennali della Facoltà;
 - b) propone ogni anno il piano finalizzato allo sviluppo dell'offerta formativa;
 - c) delega ai consigli di corso determinate competenze relative ad attività di un corso di studio;
 - d) esercita le attribuzioni nell'ambito delle procedure per la nomina in ruolo di professori/professoressa e ricercatori/ricercatrici, ai sensi dei regolamenti interni;
 - e) sottopone al Consiglio dell'Università e al Senato accademico, sentita la commissione per gli studi, le proposte concernenti i regolamenti di Facoltà nonché quelle relative all'attivazione di nuovi corsi di studio;

Art. 16 - Fakultätsrat

1. Der Fakultätsrat besteht aus:
 - a) dem Dekan/der Dekanin der/die den Vorsitz führt;
 - b) den Professoren/Professorinnen erster und zweiter Ebene auch jene mit befristetem Vertrag sowie den Forschern/Forscherinnen auf Planstelle (DPR 382/1980);
 - c) zwei gemäß Wahlordnung gewählten Vertretern/Vertreterinnen der Forscher/Forscherinnen zeitlich befristet nach Art. 24, Absatz 3 Bst.n a) und b) G. 240/2010), davon wo möglich, ein Forscher/eine Forscherin senior und ein Forscher/eine Forscherin junior.
 - d) zwei gemäß Wahlordnung gewählten Studentenvertretern/Studentenvertreterinnen;
2. An den Sitzungen des Fakultätsrates nimmt der Leiter/die Leiterin des Fakultätssekretariats mit beratender Stimme teil.
3. Der Fakultätsrat:
 - a) schlägt das Tätigkeitsprogramm samt Haushaltsvoranschlag sowie die Mehrjahrespläne der Fakultät vor;
 - b) schlägt jährlich den Plan zur Entwicklung des Studienangebotes vor;
 - c) delegiert den Studiengangsräten Zuständigkeiten betreffend die Tätigkeiten eines Studienganges;
 - d) nimmt die Zuständigkeiten im Bereich der Berufungsverfahren von Professoren/Professorinnen und Forschern/Forscherinnen gemäß der internen Regelungen zu den Berufungsverfahren wahr;
 - e) unterbreitet dem Universitätsrat und dem Senat, nach Anhörung der Studienkommission, Vorschläge zu Fakultätsordnungen sowie zur Einrichtung neuer Studiengänge;

- | | |
|--|--|
| <p>f) sottopone al Senato accademico, sentita la Commissione per gli studi, le proposte relative al regolamento didattico generale e ai regolamenti didattici dei singoli corsi di studio;</p> <p>g) nomina i/le responsabili d'area di ricerca, scegliendoli/le tra i professori/le professoresse di prima e seconda fascia nonché tra i ricercatori/le ricercatrici di ruolo e senior;</p> <p>h) delibera su ogni altra questione inerente la Facoltà che il presente Statuto non demanda ad altri organi.</p> | <p>f) unterbreitet dem Senat, nach Anhörung der Studienkommission, Vorschläge zur Allgemeinen Studienordnung und zu den Studiengangsregelungen;</p> <p>g) ernennt die Forschungssprecher/Forschungssprecherinnen der Forschungsschwerpunkte der Fakultät aus den Reihen der Professoren/Professorinnen erster und zweiter Ebene sowie der Forscher/Forscherinnen auf Planstelle und der Seniorforscher/Seniorforscherinnen;</p> <p>h) entscheidet über jede andere die Fakultät betreffende Angelegenheit, die von diesem Statut nicht anderen Gremien zugewiesen ist.</p> |
|--|--|

Art. 17 - Direttori/Direttrici di corso di studio

1. I singoli corsi di studio sono diretti da un professore/una professoressa di ruolo di prima o di seconda fascia che viene nominato/a dal/dalla Preside per una durata di tre anni accademici.

Art. 18 - Consiglio del corso di studio

1. Per ogni corso di studio viene istituito un Consiglio del corso di studio.
2. Il Consiglio del corso di studio è composto da:
 - a) il Direttore/la Direttrice di corso di studio che presiede lo stesso organo;
 - b) un professore/una professoressa di ruolo di prima o di seconda fascia o un ricercatore/una ricercatrice che viene designato/a dal Consiglio di Facoltà per la medesima durata in carica del Direttore/della Direttrice di corso;
 - c) un/una rappresentante degli studenti/delle studentesse eletto/a come da Regolamento elezioni.
3. Il Consiglio di Facoltà può delegare al Consiglio del corso di studio determinate competenze riguardanti le attività didattiche di un corso di studio.

Art. 17 - Studiengangsleiter/ Studiengangsleiterinnen

1. Die einzelnen Studiengänge werden von einem Professor/einer Professorin erster oder zweiter Ebene auf Planstelle geleitet, der/die vom Dekan/von der Dekanin der Fakultät für drei akademische Jahre ernannt wird.

Art. 18 - Studiengangsrat

1. Für jeden Studiengang wird ein Studiengangsrat eingerichtet.
2. Der Studiengangsrat besteht aus:
 - a) Dem Studiengangsleiter/der Studiengangsleiterin, der/die den Vorsitz führt;
 - b) einem Professor/einer Professorin erster oder zweiter Ebene auf Planstelle oder einem Forscher/einer Forscherin, der/die für dieselbe Amtszeit des Studiengangsleiters/der Studiengangsleiterin vom Fakultätsrat ernannt wird;
 - c) einem/einer gemäß Wahlordnung gewählten Studentenvertreter/Studentenvertreterin.
3. Der Fakultätsrat kann dem Studiengangsrat Zuständigkeiten betreffend die Lehre delegieren.

- | | |
|--|--|
| <p>4. Alle sedute del Consiglio del corso di studio possono partecipare su proposta del Direttore/della Direttrice del corso, con diritto di voto consultivo, anche esperti/esperte del settore.</p> | <p>4. An den Sitzungen des Studiengangsrats können auf Vorschlag des Studiengangsleiters/der Studiengangsleiterin auch Experten/Expertinnen des betreffenden Fachbereiches mit beratender Stimme teilnehmen.</p> |
|--|--|

Art. 19 - Commissione didattica paritetica

1. Ciascuna Facoltà istituisce una Commissione didattica paritetica avente la funzione di osservatorio permanente dell'attività didattica dei corsi di studio ad essa afferenti.
2. La Commissione didattica paritetica si compone di:
 - a) un professore/una professoressa designato/a dal competente Consiglio di Facoltà per la durata di 3 anni che non ricopra già la carica di Preside, Vicepreside o Direttore/Direttrice del corso di studio;
 - b) un/una rappresentante degli studenti/delle studentesse nominato/a secondo il Regolamento elezioni dalla Consulta degli studenti tra i/le rappresentanti degli studenti/ delle studentesse della rispettiva facoltà.
3. La Commissione didattica paritetica:
 - a) esprime un parere in merito alla corrispondenza tra i crediti da assegnare alle attività formative e gli specifici obiettivi programmati nei regolamenti didattici dei corsi di studio di afferenza;
 - b) supervisiona, sulla base degli studi di rilevazione e delle statistiche disponibili, le attività formative svoltesi nell'ambito dei corsi di studio;
 - c) propone al Consiglio di Facoltà le iniziative finalizzate a migliorare l'attività didattica;
 - d) svolge, conformemente alle vigenti disposizioni di legge, tutte le attività che le sono attribuite.

Art. 19 - Paritätisch-Didaktische Kommission

1. An jeder Fakultät wird eine Paritätisch-Didaktische Kommission eingerichtet, welche die Lehrtätigkeit in den entsprechenden Studiengängen überwacht.
2. Die Paritätisch-Didaktische Kommission besteht aus:
 - a) einem Professor/einer Professorin, der vom zuständigen Fakultätsrat für die Amtsdauer von 3 Jahren designiert wurde, der/die nicht gleichzeitig Dekan/Dekanin, Prodekan/Prodekanin oder Studiengangsleiter/Studiengangsleiterin ist;
 - b) dem Studentenvertreter/der Studentenvertreterin, welcher/welche vom Studierendenbeirat aus den Reihen der Studentenvertreter/Studentenvertreterinnen der betreffenden Fakultät gemäß Wahlordnung ernannt wird;
3. Die Paritätisch-Didaktische Kommission:
 - a) erteilt Gutachten bezüglich der Übereinstimmung zwischen den Kreditpunkten für Bildungsaktivitäten und den in den Studiengangsregelungen vorgesehenen Bildungszielen;
 - b) überwacht die im Rahmen der Studiengänge durchgeführten Bildungstätigkeiten anhand der verfügbaren Erhebungen und Statistiken;
 - c) richtet Vorschläge an den Fakultätsrat zur Verbesserung der Lehrtätigkeit;
 - d) übt alle gemäß den geltenden gesetzlichen Bestimmungen festgelegten Befugnisse und Tätigkeiten aus.

CENTRI PER LA DIDATTICA E LA RICERCA

**Art. 20 - Centri per la didattica
(Scuole/Schools)**

1. Con delibera del Consiglio dell'Università, sentito il Senato accademico possono essere istituiti centri per la didattica (Scuole/Schools) coinvolgendo anche più Facoltà. Essi rappresentano unità organizzative per attività didattiche presso cui i corsi di studio vengono raggruppati e coordinati in modo unitario. Il Consiglio dell'Università può attribuire alle Scuole (Schools) una propria dotazione finanziaria.
2. Contestualmente all'istituzione di centri per la didattica (Scuole/Schools) verrà approvato dal Consiglio dell'Università, sentito il Senato accademico, il relativo regolamento interno il quale ne definisce le finalità e le modalità di funzionamento nonché la composizione dell'organo di gestione.

Art. 21 - Centri di competenza per la ricerca

1. Presso l'Università possono essere istituiti, con delibera del Consiglio dell'Università, su proposta del/della Presidente o del Rettore/della Rettrice, sentito il Senato accademico centri di competenza che operano nell'ambito della ricerca. Le facoltà deliberano la partecipazione ai centri di competenza del personale accademico afferente.
2. I centri di competenza sono unità organizzative temporanee, dirette da un professore/una professoressa o da un ricercatore/una ricercatrice da questa o da un'altra Università o da uno studioso/una studiosa riconosciuto/a a livello internazionale.
3. Contestualmente all'istituzione del centro di competenza verrà approvato dal Consiglio dell'Università, sentito il Senato accademico, il relativo regolamento interno. Il regolamento del centro stabilisce le finalità e le modalità di

ZENTREN FÜR LEHRE UND FORSCHUNG

**Art. 20 - Zentren für Lehre
(Schulen/Schools)**

1. An der Universität können nach Anhörung des Senats und mit Beschluss des Universitätsrats, auch fakultätsübergreifend, Zentren für Lehre (Schulen/Schools) eingerichtet werden. Diese sind Organisationseinheiten für Lehrtätigkeiten, in welchen Studiengänge gebündelt und einheitlich koordiniert werden. Der Universitätsrat kann den Schulen (Schools) eine eigene Finanzausstattung zuerkennen.
2. In Zusammenhang mit der Einrichtung der Zentren für Lehre (Schulen/Schools) wird vom Universitätsrat nach Anhörung des Senats eine entsprechende Geschäftsordnung genehmigt. Diese bestimmt die Zielsetzungen, die Arbeitsweise sowie die Zusammensetzung des Führungsgremiums.

**Art. 21 - Kompetenzzentren für die
Forschung**

1. An der Universität können mit Beschluss des Universitätsrates und auf Vorschlag des Präsidenten/der Präsidentin oder des Rektors/der Rektorin sowie nach Anhörung des Senats Kompetenzzentren für die Forschung eingerichtet werden. Die Fakultäten entscheiden über das dem Kompetenzzentrum zuzuordnende Lehrpersonal.
2. Die Kompetenzzentren sind Organisationseinheiten, die für einen befristeten Zeitabschnitt errichtet und von einem/einer an dieser oder einer anderen Universität angestellten Professor/Professorin oder Forscher/Forscherin oder von einem/einer externen, international anerkannten Wissenschaftler/Wissenschaftlerin geleitet werden.
3. In Zusammenhang mit der Errichtung des Kompetenzzentrums wird vom Universitätsrat und nach Anhörung des Senats, eine Geschäftsordnung genehmigt. Die Geschäftsordnung des Kompetenzzentrums bestimmt

funzionamento dello stesso, nonché la composizione del organo di gestione e del comitato scientifico, quest'ultimo preferibilmente di composizione internazionale.

4. I centri di competenza possono anche svolgere attività commissionate da Enti pubblici o privati, dietro il pagamento di un corrispettivo.
5. I contratti, gli accordi e le convenzioni che riguardano i centri di competenza devono essere approvati dal Consiglio dell'Università.
6. La gestione amministrativa e contabile dei centri di competenza segue il regolamento per l'amministrazione, la finanza e la contabilità. Il Consiglio dell'Università può attribuire ai centri di competenza una propria dotazione finanziaria.

dessen Zielsetzung und Arbeitsweise sowie die Zusammensetzung des Führungsgremiums und des vorzugsweise international zusammengesetzten wissenschaftlichen Beirats.

4. Die Kompetenzzentren können bezahlte Aufträge von öffentlichen oder privaten Körperschaften annehmen.
5. Verträge, Konventionen und Abkommen, welche die Kompetenzzentren betreffen, müssen vom Universitätsrat genehmigt werden.
6. Die Verwaltung und Finanzbuchhaltung der Kompetenzzentren wird von der Universität gemäß den Vorschriften der Verwaltungs- und Finanzordnung geführt. Der Universitätsrat kann den Kompetenzzentren eine eigene Finanzausstattung zuerkennen.

ALTRI ORGANI

Art. 22 - Collegio dei revisori dei conti

1. Il controllo della gestione contabile e amministrativa viene eseguito da un Collegio di revisori dei conti, nominato dal Consiglio dell'Università, ed i/le cui componenti sono iscritti/e nell'albo dei revisori contabili. Il Collegio dei revisori dei conti è composto da tre membri effettivi e da due membri supplenti. Uno dei membri effettivi del Collegio viene designato dalla Provincia Autonoma di Bolzano. Il/la Presidente del Collegio è nominato/a dal Consiglio dell'Università. Il Collegio dei revisori dura in carica quattro anni e può essere riconfermato.

Art. 23 - Nucleo di valutazione

1. L'Università adotta, anche ai sensi della legge 19 ottobre 1999 n. 370 un sistema di valutazione interna della gestione amministrativa, delle attività didattiche e di ricerca, nonché degli interventi finalizzati al sostegno del diritto allo studio. Verifica altresì mediante analisi comparative dei costi e dei rendimenti, il corretto utilizzo delle risorse, la produttività

ANDERE GREMIEN

Art. 22 - Rechnungsprüferkollegium

1. Die Aufsicht über die Buchhaltung und Verwaltungstätigkeit wird durch ein vom Universitätsrat ernanntes Rechnungsprüferkollegium ausgeübt, dessen Mitglieder in das Berufsverzeichnis der Rechnungsprüfer eingetragen sind. Das Rechnungsprüferkollegium besteht aus drei ordentlichen und zwei Ersatzmitgliedern. Ein ordentliches Mitglied wird von der Autonomen Provinz Bozen namhaft gemacht. Der/die Präsident/Präsidentin wird vom Universitätsrat ernannt. Das Rechnungsprüferkollegium bleibt vier Jahre im Amt und kann wiederbestätigt werden.

Art. 23 - Evaluierungskomitee

1. Die Universität führt, auch im Sinne des Gesetzes Nr. 370 vom 19. Oktober 1999, eine interne Evaluierung der Verwaltungstätigkeit, der Lehre und Forschung sowie der Maßnahmen zur Unterstützung des Rechtes auf Studium durch. Durch eine Kostenleistungsrechnung werden der korrekte Einsatz der Mittel, die Ergebnisse der

della ricerca e della didattica, nonché l'imparzialità e il buon andamento dell'azione amministrativa.

2. Il Nucleo di valutazione viene nominato dal Consiglio dell'Università, resta in carica per quattro anni ed è composto dai seguenti membri:
 - a) tre membri, scelti tra studiosi/e ed esperti/e nel campo della valutazione. Uno/a di loro viene scelto/a tra esperti/e dell'Università;
 - b) un/una rappresentante degli studenti/delle studentesse scelto/a dalla Consulta degli studenti tra i suoi/ le sue componenti secondo il Regolamento elezioni.

Art. 24 - Collegio di disciplina

1. È istituito, per i procedimenti disciplinari promossi nei confronti dei/delle docenti universitari/e, il Collegio di disciplina. Esso è composto da tre professori ordinari/professoressa ordinaria nominati/e dal Consiglio dell'Università, sentito/a il Rettore/la Rettrice, tra il personale accademico di ruolo. Tutti i/e componenti restano in carica per la durata di tre anni e sono confermabili.
2. Il Collegio opera secondo il principio del giudizio fra pari e nel rispetto del contraddittorio, in conformità di quanto stabilito dall'articolo 10 della legge 30 dicembre 2010, n. 240 e della vigente normativa in materia.
3. Su segnalazione del Rettore/della Rettrice, il Collegio di disciplina cura, nel rispetto dei principi di riservatezza e del contraddittorio, l'istruttoria dei provvedimenti disciplinari nei confronti del personale docente, e formula la proposta di provvedimento in merito.
4. Il Rettore/la Rettrice, venuto/a a conoscenza di un fatto che deve dar luogo ad una sanzione disciplinare superiore alla censura, dà avvio al procedimento, trasmettendo gli atti al Collegio. Per i fatti che possono dar luogo ad una sanzione disciplinare non

Forschungs- und Lehrtätigkeit sowie die Unparteilichkeit und die Verwaltungstätigkeit überprüft.

2. Das Evaluierungskomitee wird vom Universitätsrat ernannt, bleibt vier Jahre im Amt und setzt sich aus folgenden Mitgliedern zusammen:
 - a) drei Mitglieder, die unter Wissenschaftlern/ Wissenschaftlerinnen und Evaluierungsfachleuten ausgewählt werden. Eines von ihnen wird aus den Reihen der Fachleute der Universität ausgewählt;
 - b) einem Studentenvertreter/einer Studentenvertreterin, welcher/welche vom Studierendenbeirat aus den Reihen seiner Mitglieder gemäß Wahlordnung ernannt wird.

Art. 24 - Disziplinarkommission

1. Es wird eine Kommission für Disziplinarverfahren gegenüber dem Lehrpersonal bestellt. Diese besteht aus drei ordentlichen Professoren/Professorinnen, die nach Anhörung des Rektors/der Rektorin vom Universitätsrat aus den Reihen des Planstellenpersonals benannt werden. Alle Mitglieder bleiben für drei Jahre im Amt und können bestätigt werden.
2. Die Kommission urteilt nach dem Prinzip der Gleichrangigkeit und unter Einhaltung des Verhandlungsgrundsatzes, gemäß den Bestimmungen des Art. 10 des Gesetzes vom 30. Dezember 2010, Nr. 240 und der geltenden gesetzlichen Vorschriften.
3. Auf Hinweis des Rektors/der Rektorin und unter Wahrung des Prinzips der vertraulichen Behandlung und ohne Beeinträchtigung des Verhandlungsgrundsatzes, wickelt die Disziplinarkommission das Untersuchungsverfahren für die Anwendung der Disziplinarmaßnahmen gegenüber dem Lehrpersonal ab und erarbeitet einen Vorschlag für die zu ergreifende Disziplinarmaßnahme.
4. Der Rektor/die Rektorin, der/die über einen Sachverhalt Kenntnis erlangt hat, welcher mit einer stärkeren Maßnahme als einer Rüge bestraft werden muss, leitet das Verfahren ein und übermittelt die Unterlagen an die Disziplinarkommission. Sachverhalte, die mit

superiore alla censura il Rettore/la Rettrice procede con proprio provvedimento. Anche in questo caso il principio del contraddittorio dovrà essere rispettato.

5. Il Collegio, all'esito dell'istruttoria, formula un parere vincolante per il Consiglio dell'Università che in conformità con il parere, irroga la sanzione o dispone l'archiviazione.
6. La partecipazione al Collegio di disciplina non dà luogo alla corresponsione di compensi, emolumenti, indennità o rimborso spese.

Art. 25 - Commissione etica

1. L'Università dispone di un codice etico le cui disposizioni sono vincolanti per tutti i membri della stessa.
2. La Commissione etica ha funzioni di natura consultiva, di sostegno e di controllo per quanto concerne l'applicazione delle disposizioni contenute nel codice etico.
3. La composizione e le attribuzioni della Commissione etica sono stabilite all'interno del codice etico approvato dal Consiglio dell'Università, sentito il Senato accademico.
4. La partecipazione alla Commissione etica non dà luogo alla corresponsione di compensi, emolumenti, indennità o rimborso spese.

Art. 26 - Consulta degli studenti

1. La Consulta degli studenti è un organo consultivo dell'Università con funzioni di coordinamento dell'attività dei/delle rappresentanti degli studenti/delle studentesse.
2. La Consulta degli studenti è composta da tutti/e i/le rappresentanti degli studenti/delle studentesse eletti/e nei vari organi e viene nominata dal Rettore/dalla Rettrice.
3. La Consulta degli studenti è presieduta dal/dalla rappresentante degli studenti o dal/dalla suo/sua sostituto/a nominati/e dalla Consulta degli studenti tra i suoi componenti.

einer Rüge bestraft werden können, wickelt der Rektor/die Rektorin durch direkte Verfügungsgewalt ab. Auch in diesem Fall muss das Verhandlungsprinzip gewahrt werden.

5. Am Ende des Untersuchungsverfahrens erarbeitet die Disziplinarkommission ein verbindliches Gutachten für den Universitätsrat, der entsprechend diesem Gutachten die Disziplinarmaßnahme verfügt oder den Fall archiviert.
6. Aus der Teilnahme an der Disziplinarkommission erwächst den Mitgliedern derselben kein Anspruch auf Vergütung, Lohnbezüge, Entschädigung oder Kostenrückerstattung.

Art. 25 - Ethikkommission

1. Die Universität verfügt über einen Ethikkodex, dessen Bestimmungen für jedes Universitätsmitglied verbindlich sind.
2. Die Ethikkommission berät und unterstützt die Universität bei der Anwendung der Bestimmungen des Ethikkodexes und kontrolliert dessen Einhaltung.
3. Die Zusammensetzung und Befugnisse der Ethikkommission sind im Ethikkodex festgelegt, der vom Universitätsrat nach Anhörung des Senats genehmigt wird.
4. Aus der Mitgliedschaft in der Ethikkommission erwächst den Mitgliedern derselben kein Anspruch auf Vergütung, Lohnbezüge, Entschädigung oder Kostenrückerstattung.

Art. 26 - Studierendenbeirat

1. Der Studierendenbeirat ist ein Beratungsgremium der Universität und koordiniert die Tätigkeit der Studentenvertreter/Studentenvertreterinnen.
2. Der Studierendenbeirat besteht aus allen in die Gremien gewählten Studentenvertretern/Studentenvertreterinnen und wird vom Rektor/von der Rektorin ernannt.
3. Der Vorsitzende/die Vorsitzende und dessen/deren Stellvertreter/Stellvertreterin wird vom Studierendenbeirat aus den Reihen seiner Mitglieder ernannt.

4. La Consulta degli studenti:

- a) formula proposte e, se richiesto, esprime parere su questioni attinenti all'attività didattica, ai servizi per gli studenti/le studentesse e al diritto allo studio;
- b) esprime parere sull'organizzazione delle prestazioni a tempo parziale degli studenti/delle studentesse per attività di supporto alla didattica, alla ricerca e al diritto allo studio;
- c) predispone il regolamento per il suo funzionamento che dovrà essere approvato dal Consiglio dell'Università, previo parere del Senato accademico.

Art. 27 - Comitato per le pari opportunità

- 1. L'Università istituisce un Comitato per le pari opportunità che, in osservanza dei principi legislativi vigenti in materia, si occupa di supportare gli organi nell'applicazione di tali principi; in accordo con l'intera comunità universitaria, si impegna, attraverso iniziative mirate, a favorire un ambiente privo di discriminazioni orientato alle pari opportunità.
- 2. Il Comitato per le pari opportunità è composto da:
 - a) un/una rappresentante del personale docente;
 - b) un/una rappresentante del personale tecnico ed amministrativo;
 - c) un/una rappresentante degli studenti/delle studentesse.
 Tutti i componenti del Comitato vengono nominati ai sensi del Regolamento elezioni vigente.
- 3. Il Comitato nomina il/la suo/a Presidente scegliendolo/a tra i membri di cui alle lettere a) e b).
- 4. I membri del Comitato indicati nelle lettere a) e b) rimangono in carica tre anni mentre quelli di cui alla lettera c) rimangono in carica due anni.

4. Der Studierendenbeirat:

- a) erarbeitet Vorschläge und erteilt auf Anfrage Gutachten bezüglich der Lehrtätigkeit, der Dienstleistungen für Studierende und des Rechts auf Studium;
- b) äußert sich zur Organisation der Teilzeitleistungen der Studierenden, die für unterstützende Tätigkeiten im Bereich der Lehre, der Forschung und des Rechts auf Studium herangezogen werden;
- c) verfasst seine eigene interne Regelung, die vom Universitätsrat nach Anhörung des Senats genehmigt werden muss.

Art. 27 - Beirat für Chancengleichheit

- 1. An der Universität wird ein Beirat für Chancengleichheit eingerichtet, der in Anwendung der einschlägigen Rechtsprinzipien die Arbeit der Gremien bei der Einhaltung dieser Prinzipien unterstützt und sich durch gezielte Initiativen und in Kontakt mit der Universitätsgemeinschaft für ein diskriminierungsfreies, gleichstellungsorientiertes Umfeld an der Universität einsetzt.
- 2. Der Beirat für Chancengleichheit besteht aus:
 - a) einem/einer Vertreter/Vertreterin des Lehrpersonals;
 - b) einem Vertreter/einer Vertreterin des technischen Personals und des Verwaltungspersonals;
 - c) einem Vertreter/einer Vertreterin der Studierenden.
 Alle Mitglieder des Beirates werden gemäß geltender Wahlordnung ernannt.
- 3. Der Beirat ernennt den Vorsitzenden/die Vorsitzende aus den Reihen der Mitglieder gemäß Buchstabe a) und b).
- 4. Die Mitglieder des Beirats gemäß Buchstabe a) und b) bleiben für drei Jahre im Amt und jene gemäß Buchstabe c) bleiben 2 Jahre im Amt.

- | | |
|---|--|
| <p>5. Le attribuzioni e gli obiettivi sono indicati nel regolamento dello stesso Comitato pari opportunità dell'Università, approvato dal Consiglio dell'Università.</p> <p>6. Il Comitato pari opportunità elabora per il Consiglio dell'Università annualmente una relazione sugli obiettivi raggiunti.</p> | <p>5. Die Befugnisse und Ziele des Beirats für Chancengleichheit sind in einer Regelung festgelegt, welche vom Universitätsrat genehmigt wird.</p> <p>6. Der Beirat für Chancengleichheit erstellt jährlich für den Universitätsrat einen Bericht über die erreichten Ziele.</p> |
|---|--|

III. STUDI

Art. 28 - Offerta didattica

1. Ai sensi del D.M. 22 ottobre 2004, n. 270, l'Università conferisce i seguenti titoli accademici:
 - a) laurea (L); Bachelor
 - b) laurea magistrale (L.M.); Master
 - c) diploma di specializzazione (D.S);
 - d) dottorato di ricerca (D.R.);
 - e) master universitari di I° e II° livello.
2. L'Università, sentiti i Consigli di Facoltà e il parere del Senato accademico, può istituire i corsi previsti dall'articolo 6 della legge 19 novembre 1990, n. 341.

Art. 29 - Cooperazione ed altre attività istituzionali

1. L'Università collabora con organismi nazionali ed internazionali alla definizione e alla realizzazione di programmi di cooperazione scientifica e di formazione.
2. I relativi accordi di collaborazione possono prevedere l'attivazione di corsi di studio integrati presso una o più Università, nonché programmi di ricerca congiunti. Le Università coinvolte riconosceranno la validità del percorso seguito dagli studenti/dalle studentesse presso le Università e le istituzioni universitarie partecipanti. Questo vale altresì per i titoli accademici conseguiti al termine dei corsi di studio integrati.

III. STUDIEN

Art. 28 - Studienangebot

1. Gemäß MD vom 22. Oktober 2004 Nr. 270, verleiht die Universität folgende akademische Studientitel:
 - a) laurea (L); Bachelor
 - b) laurea magistrale (LS); Master
 - c) Spezialisierungsdiplom (DS);
 - d) Forschungsdoktorat (DR);
 - e) universitäre Mastergrade der ersten und zweiten Ebene
2. Die Universität kann nach Anhörung der Fakultätsräte und des Senats die von Artikel 6 des Gesetzes Nr. 341 vom 19. November 1990 vorgesehenen Kurse einrichten.

Art. 29 - Kooperation und andere institutionelle Aktivitäten

1. Die Universität kooperiert mit nationalen und internationalen Einrichtungen zur Erstellung und Durchführung von Programmen für wissenschaftliche Zusammenarbeit und Ausbildung.
2. Die entsprechenden Kooperationsverträge können die Durchführung integrierter Studiengänge an einer oder mehreren Universitäten sowie gemeinsame Forschungsprogramme vorsehen. Die beteiligten Universitäten erkennen die Gültigkeit von Studienleistungen an, die von den Studierenden an den Partneruniversitäten und -hochschulen erbracht wurden. Dies gilt ebenso für die akademischen Studientitel, mit denen die integrierten Studiengänge abgeschlossen werden.

3. Gli accordi di collaborazione aventi come oggetto l'istituzione di corsi di studio e di dottorato di ricerca nel territorio della Provincia di Bolzano, dovranno essere resi noti al Ministero dell'Istruzione, dell'Università e della Ricerca entro trenta giorni dalla stipula. Tali accordi diverranno esecutivi decorso il termine di trenta giorni dal loro ricevimento, a meno che il Ministero dell'Istruzione, dell'Università e della Ricerca entro tale termine non abbia sollevato delle contestazioni giustificate con la violazione della legge, degli obblighi internazionali dello Stato italiano o dei criteri stabiliti nei decreti emessi sulla base dell'articolo 17, comma 95, della legge 15 maggio 1997, n. 127.
4. L'Università promuove e sostiene gli scambi internazionali dei propri/delle proprie componenti anche con interventi di natura economica. La stessa può mettere a disposizione e gestire strutture di supporto e di alloggio per ospiti, anche in collaborazione con altri enti e in modo particolare con quelli il cui scopo sia quello di assicurare il diritto allo studio.
5. L'Università potrà rilasciare attestati a coloro che hanno partecipato a corsi di specializzazione e di perfezionamento nonché ad attività istituzionali organizzati dalla stessa.
6. Per la realizzazione dei corsi di cui al comma 5, l'Università potrà avvalersi anche di forme di collaborazione esterna come previsto dall'articolo 8 della legge 19 novembre 1990, n. 341.
3. Die Kooperationsverträge, welche die Einrichtung von Studiengängen und Doktoratsstudiengängen in der Provinz Bozen zum Gegenstand haben, werden innerhalb von dreißig Tagen nach ihrem Abschluss dem Ministerium für Bildung, Universität und Forschung zur Kenntnis gebracht. Diese Verträge werden nach Ablauf einer Frist von weiteren dreißig Tagen nach ihrem Erhalt rechtswirksam. Es sei denn, dass das Ministerium für Bildung, Universität und Forschung innerhalb dieser Frist Einwände erhebt, die mit Gesetzesverstoß, gegen die internationalen Verpflichtungen des italienischen Staates oder gegen jene Kriterien begründet werden können, welche in den laut Art. 17 Abs. 95 des Gesetzes vom 15. Mai 1997, Nr. 127 erlassenen Dekreten festgelegt sind.
4. Die Universität fördert den internationalen Austausch ihrer Mitglieder auch durch finanzielle Maßnahmen. Sie kann auch in Zusammenarbeit mit anderen Körperschaften, insbesondere solchen, deren Ziel die Förderung des Rechts auf das Studium ist, Einrichtungen zur Unterbringung und Versorgung von Gästen bereitstellen und führen.
5. Die Universität kann den Teilnehmern/Teilnehmerinnen an Spezialisierungs- und Weiterbildungskursen sowie an anderen von ihr organisierten institutionellen Tätigkeiten Bescheinigungen ausstellen.
6. Zur Durchführung der in Absatz 5 aufgeführten Kurse kann sich die Universität auch Formen externer Zusammenarbeit bedienen, wie in Art. 8 des Gesetzes vom 19. November 1990 Nr. 341 vorgesehen.

IV. CENTRI DI SERVIZIO

Art. 30 - Centri di servizio

1. L'istituzione dei centri di servizio viene deliberata dal Consiglio dell'Università su proposta del Direttore/della Direttrice, sentito il Senato accademico.
2. Lo stesso Consiglio dell'Università stabilisce, su proposta del Direttore/della Direttrice, sentito il Senato accademico, le modalità per l'organizzazione e il funzionamento dei centri di servizio.
3. Le attività finalizzate all'apprendimento e alla certificazione delle conoscenze linguistiche sono gestite da un centro interfacoltà denominato Centro linguistico di Ateneo.
4. La biblioteca universitaria cura l'acquisto, la conservazione, la catalogazione e la consultazione del patrimonio bibliografico e documentale, nonché l'organizzazione e la diffusione di informazioni di carattere bibliografico.

V. DISPOSIZIONI AMMINISTRATIVE

Art. 31 - Principi dell'organizzazione e dell'amministrazione

1. Compito primario dell'organizzazione e dell'amministrazione universitaria è quello di un supporto efficiente ed efficace alle attività didattiche e di ricerca. Essa agisce in conformità ai principi di un utilizzo responsabile dei fondi a disposizione.

IV. DIENSTLEISTUNGSEINRICHTUNGEN

Art. 30 - Dienstleistungseinrichtungen

1. Die Einrichtung von Dienstleistungseinrichtungen wird auf Vorschlag des Universitätsdirektors/der Universitätsdirektorin vom Universitätsrat nach Anhörung des Senats beschlossen.
2. Der Universitätsrat legt auf Vorschlag des Universitätsdirektors/der Universitätsdirektorin und nach Anhörung des Senats die Regeln für die Organisation und Funktionsweise der Dienstleistungseinrichtungen fest.
3. Die Vermittlung, Überprüfung und Zertifizierung von Sprachkenntnissen erfolgt in einer fakultätsübergreifenden Einrichtung, dem Sprachenzentrum.
4. Die Universitätsbibliothek betreut den Ankauf, die Aufbewahrung, Katalogisierung und Konsultierung des bibliographischen und dokumentarischen Bestandes sowie die Organisation und Verbreitung bibliographischer Informationen.

V. VERWALTUNGSBESTIMMUNGEN

Art. 31 - Grundsätze der Organisation und Verwaltung

1. Hauptaufgabe der Organisation und Verwaltung ist die effiziente und effektive Unterstützung der Lehre und Forschung. Sie handelt nach den Grundsätzen des verantwortungsvollen Einsatzes der zur Verfügung stehenden Mittel.

Art. 32 - Piano di organizzazione e regolamento per l'amministrazione, la finanza e la contabilità

1. Il Consiglio dell'Università, su proposta del Direttore/della Direttrice e attraverso il piano di organizzazione, determina il numero e il tipo di strutture organizzative necessarie al regolare svolgimento dell'attività amministrativa, nonché i relativi ambiti.
2. La gestione finanziaria e contabile dell'Università è disciplinata dal regolamento per l'amministrazione, la finanza e la contabilità.
3. Il Consiglio dell'Università approva con delibera il bilancio di previsione entro il mese di dicembre e il bilancio consuntivo entro i termini stabiliti dalla normativa vigente; la durata dell'esercizio corrisponde all'anno solare.

VI. DISPOSIZIONI FINALI

Art. 33 - Entrata in vigore dello Statuto

1. La data di entrata in vigore del presente statuto viene fissata nel decreto di emanazione del presidente, pubblicato nella Gazzetta ufficiale della Repubblica Italiana.

Art. 32 - Organisationsplan und Verwaltungs- und Finanzordnung der Universität

1. Der Universitätsrat bestimmt auf Vorschlag des Universitätsdirektors/der Universitätsdirektorin im Organisationsplan die Anzahl und die Art der für den reibungslosen Ablauf der Verwaltungstätigkeit erforderlichen Organisationseinheiten sowie deren Aufgabenbereiche.
2. Das Finanz- und Rechnungswesen der Universität wird in der Verwaltungs- und Finanzordnung geregelt.
3. Der Universitätsrat beschließt den Haushaltsvoranschlag innerhalb Dezember und die Jahresabschlussrechnung innerhalb der vorgesehenen Termine laut den geltenden Bestimmungen. Das Haushaltsjahr entspricht dem Kalenderjahr.

VI. SCHLUSSBESTIMMUNGEN

Art. 33 - Rechtswirksamkeit des Statuts

1. Das Inkrafttreten dieses Statuts wird mit Dekret des Präsidenten festgelegt, welches im Amtsblatt der Republik Italiens veröffentlicht wird.



Appendix III

1 PREMESSE

1.1 OBIETTIVI DEL PIANO TRIENNALE

Il presente piano triennale è stato redatto in accordo tra vertici universitari, facoltà e aree amministrative. L'obiettivo ultimo del piano è definire una pianificazione strategica pluriennale d'Ateneo nel campo della didattica, della ricerca, nello sviluppo del proprio personale e dell'organizzazione; nonché definire il fabbisogno di medio periodo dal punto di vista finanziario e infrastrutturale.

Al fine di verificare l'effettiva applicazione del qui presente piano, l'Ateneo si dota di un sistema di controlling e monitoraggio, grazie al quale, per mezzo di indicatori e rapporti intermedi verrà verificato il grado di raggiungimento degli obiettivi prefissati. L'introduzione di un sistema di definizione degli obiettivi tra vertici universitari e strutture accademiche ed amministrative sarà premessa necessaria per un'ottimale implementazione di quanto sopra esposto.

Il presente piano triennale funge da base per la pianificazione annuale. Avrà carattere dinamico e annualmente sarà revisionato e ottimizzato in accordo con i vertici universitari, previa verifica degli obiettivi raggiunti. A tal fine il servizio di staff Controlling metterà semestralmente a disposizione dei principali decisori interni una relazione riportante lo stato degli indicatori.

Il piano triennale individua i contenuti fondanti per la convenzione programmatica-finanziaria con la Provincia Autonoma di Bolzano per gli anni 2014-2016.

Riassumendo, lo sviluppo strategico della Libera Università di Bolzano si orienterà nei prossimi 3 anni lungo le seguenti direttrici:

1. Rafforzamento del plurilinguismo, attraverso un costante monitoraggio delle competenze linguistiche degli studenti e del corpo docente;
2. Focalizzazione della didattica sulle concrete esigenze del mercato del lavoro secondo i principi del lifelong learning;
3. Miglioramento della formazione degli insegnanti grazie ad una collaborazione coordinata con le università di Innsbruck e Trento (Euregio-School of Education);
4. Sviluppo e ampliamento dell'offerta didattica interdisciplinare e interfacoltà;
5. Creazione di programmi di studio congiunti e internazionali, in particolare con l'università dell'Euregio Bolzano-Innsbruck-Trento;
6. Sviluppo di un programma di formazione per il personale accademico, tenuto conto dell'effettivo fabbisogno;
7. Individuazione delle principali tematiche nella ricerca e sostegno alla ricerca interdisciplinare;
8. Rafforzamento/Intensificazione della cooperazione con le istituzioni di ricerca operanti in ambito locale, Accademia Europea di Bolzano e Centro per la sperimentazione agraria e forestale di Laimburg;
9. All'interno dei progetti legati al parco tecnologico, si promuove un rafforzamento della ricerca innovativa nelle tecnologie di base in collaborazione con l'imprenditoria locale nel campo delle produzioni energetiche (Klimaenergy), delle tecnologie alimentari e della tecnologia alpina;
10. Sviluppo sistematico del personale amministrativo e accademico;
11. Ampliamento e sviluppo sistematico di giovani leve radicate sul territorio locale;
12. Riorganizzazione e semplificazione della struttura decisionale;
13. Introduzione di un monitoraggio qualitativo interno dei risultati raggiunti in campo accademico e amministrativo.



1.2 OBIETTIVI NELLA DIDATTICA E RICERCA

Per quanto concerne la didattica i temi principali sui quali si concentrerà nei prossimi anni la Libera Università di Bolzano, saranno il consolidamento dell'attuale offerta formativa, l'ampliamento della proposta di formazione su tutti e tre i livelli della formazione universitaria, lo sviluppo di un'offerta interdisciplinare e interfacoltà e di programmi di studio internazionali.

A tal fine viene proposto un corso di laurea triennale in *Business Informatic* presso la Facoltà di Scienze e tecnologie informatiche in collaborazione con la Facoltà di Economia, nonché un corso di studio in Elettronica ed Automazione alla Facoltà di Scienze e tecnologie in collaborazione con la Facoltà di Scienze e Tecnologie informatiche.

L'Ateneo incrementerà nel prossimo futuro i programmi internazionali in collaborazione con università estere (joint/double degree). Sono pianificati 6 programmi di studio: due corsi di laurea magistrale europei in *Computational Logic* e *Software Engineering* alla Facoltà di Scienze e Tecnologie informatiche, tre corsi di laurea magistrale in *Construction Automation, Food technology e Mechanical Engineering and Management* alla Facoltà di Scienze e Tecnologie ed un corso di laurea magistrale in Giornalismo e Comunicazione alla Facoltà di Scienze della Formazione. Per tutti questi corsi di studio è previsto che gli studenti svolgano una parte del loro percorso formativo all'estero e ricevano oltre al titolo di studio italiano anche il titolo di studio estero.

Nel campo della formazione permanente, saranno organizzati annualmente, principalmente presso la Facoltà di Scienze della Formazione, 2-3 corsi professionalizzanti definiti in accordo con le istituzioni locali (Intendenze scolastiche, associazioni di categoria, etc).

L'Ateneo prevede complessivamente nei prossimi anni la seguente nuova offerta formativa:

Corsi di laurea	5
Corsi di laurea magistrale	11
Dottorati di ricerca	1
Master universitari	6
Corsi di formazione universitari	5

L'Ateneo promuove una ricerca per macroaree, dove la ricerca innovativa nelle tecnologie di base, nel rispetto di criteri di sostenibilità integrata degli ambiti CasaClima e Produzioni energetiche, Tecnologie alpine e Tecnologie agroalimentari, verrà potenziata all'interno del Parco tecnologico in collaborazione con l'Eurac e con il Centro di sperimentazione di Laimburg.

La ricerca scientifica si orienta ai principi della comunità scientifica internazionale e viene appositamente monitorata. Compito della biblioteca d'ateneo è offrire un apposito servizio di supporto, come per esempio la messa a disposizione e l'archiviazione di lungo periodo di dati primari per l'attività di ricerca, nonché ogni altro possibile sostegno per l'ottimizzazione del rendimento della ricerca.

Nei prossimi anni l'Ateneo si impegnerà nel definire chiaramente il proprio ruolo insieme alle istituzioni di ricerca altoatesine. Una stretta collaborazione con l'EURAC ed il Centro per la sperimentazione di Laimburg, porterà allo sviluppo di un profilo coordinato e concreto della ricerca in Alto Adige. L'attenzione principale verterà sul reciproco scambio delle conoscenze nel campo della ricerca, nonché sulla rilevanza dei risultati della ricerca per le imprese locali e le istituzioni pubbliche nel campo della formazione, del sociale e dell'amministrazione.

Per quanto concerne le università dell'Euregio, Bolzano-Innsbruck-Trento, verranno intensificati i contatti con gli Atenei partner, attivando insieme programmi di studio e di scambio, nonché realizzando progetti di ricerca comuni.



La commissione di ricerca si farà carico del coordinamento della ricerca a livello d'Ateneo, promuoverà i progetti di ricerca interfacoltà e con altri enti di ricerca. Valuterà inoltre tutti i progetti di ricerca finanziati con fondi interni.



2 SITUAZIONE ATTUALE E SVILUPPO 2014-2016 DELLA LIBERA UNIVERSITÀ DI BOLZANO

2.1 DIDATTICA

2.1.1 SITUAZIONE ATTUALE

Nell'anno accademico 2012-2013 alla Libera Università di Bolzano sono stati offerti i seguenti corsi di studio:

	N&T	INF	WWS	BWS	DES	LUB
Corsi di laurea	2	1	3	3	1	10
Corsi di laurea magistrale	2*	1	2	1		6
Laurea magistrale a ciclo unico e altri prog. studi				2		2
Dottorati di ricerca	2	1		1		4
Totale	6	3	5	7	1	22

*Fruit Science läuft aus

Nell'anno accademico 2012-2013 gli studenti iscritti ammontano in totale a 3.375 e sono suddivisi nel modo seguente:

	Isritti	Immatricolati
Facoltà di Scienze e Tecnologie	225	87
Facoltà di Scienze e Tecnologie informatiche	264	58
Facoltà di Economia	902	270
Facoltà di Scienze della Formazione	1.535	458
Facoltà di Design e Arti	235	60
Studium Generale	180	53
Studenti-Senior	34	34
Totale	3.375	1.020

2.1.2 SVILUPPO

Nell'ambito della didattica la Libera Università di Bolzano prevede l'attivazione di 5 nuovi corsi di laurea, 11 corsi di laurea magistrale, 1 dottorato di ricerca, 6 master universitari e 5 corsi di formazione universitari. Obiettivo è sviluppare corsi di studio altamente qualitativi possibilmente in contesti trilingui. Ciò al fine di affinare ulteriormente questa caratteristica della Libera Università di Bolzano.

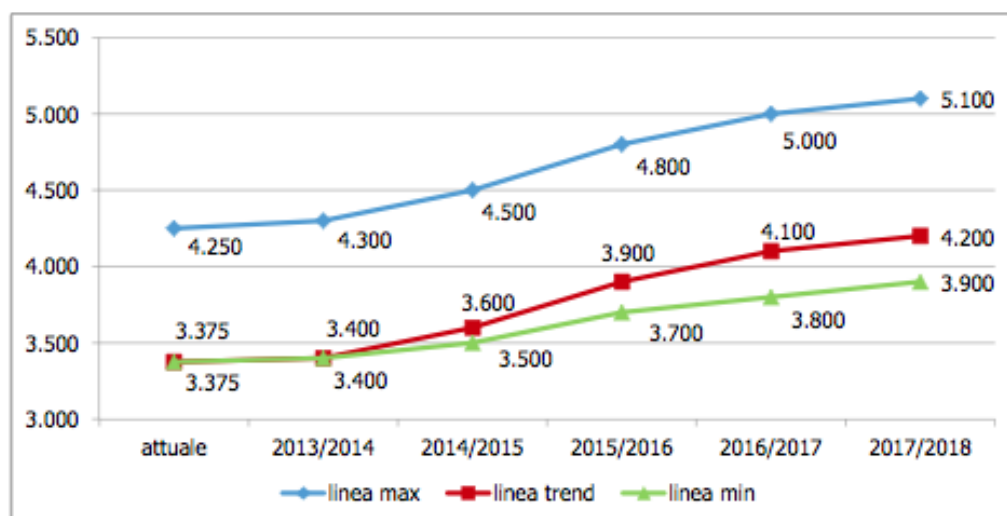


La seguente tabella fornisce un quadro d'insieme dello sviluppo dell'offerta didattica nei prossimi tre anni:

	N&T			INF			WWS			BWS			DES			LUB		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Corsi di laurea		1				1					1			1		0	3	1
Corsi di laurea magistrale	2	1	2		1	1		1			1	1			1	2	4	5
Dottorati di ricerca								1								0	1	0
Master universitari							1			2	1	1				3	1	1
Corsi di formazione universitari								1		1	1	1				1	2	1
Totale	2	2	2	0	1	2	1	3	0	3	4	3	0	1	1	6	11	8

Si sottolinea che per l'anno accademico 2016/17 sono pianificati un corso di laurea triennale in Management delle Costruzioni alla Facoltà di Scienze e tecnologie, nonché un master professionalizzante e un corso di formazione universitario presso la Facoltà di Scienze della Formazione.

Nel grafico sottostante sono riportati i tre possibili scenari relativi allo sviluppo del numero di studenti.



La linea superiore indica il numero di studenti raggiunto in caso di copertura massima dei numeri di posti di studio programmati per l'offerta didattica attuale e di quella nuova; la linea di tendenza parte dal numero effettivo di studenti e ne indica lo sviluppo sulla base del numero massimo di studenti che accoglieranno la nuova offerta didattica, mentre la linea inferiore parte anch'essa dal numero effettivo di studenti ed indica lo sviluppo secondo la percentuale attuale di copertura dei diversi programmi di studio.



2.2 PERSONALE

Nella politica di assunzione del personale accademico si tende a mantenere un equilibrio tra le assunzioni per mezzo dei concorsi nazionali e delle chiamate dirette (ai sensi della legge Bassanini o della riforma Moratti). Quest'ultimo canale di reclutamento è, visto il profilo internazionale dell'Ateneo, di significativa importanza. Si mira ad una equilibrata composizione del personale accademico, composto da professori di I fascia, professori di II fascia e ricercatori. Sarà infine prioritario nei prossimi anni il reclutamento mirato nell'accademia di nuove leve radicate sul territorio.

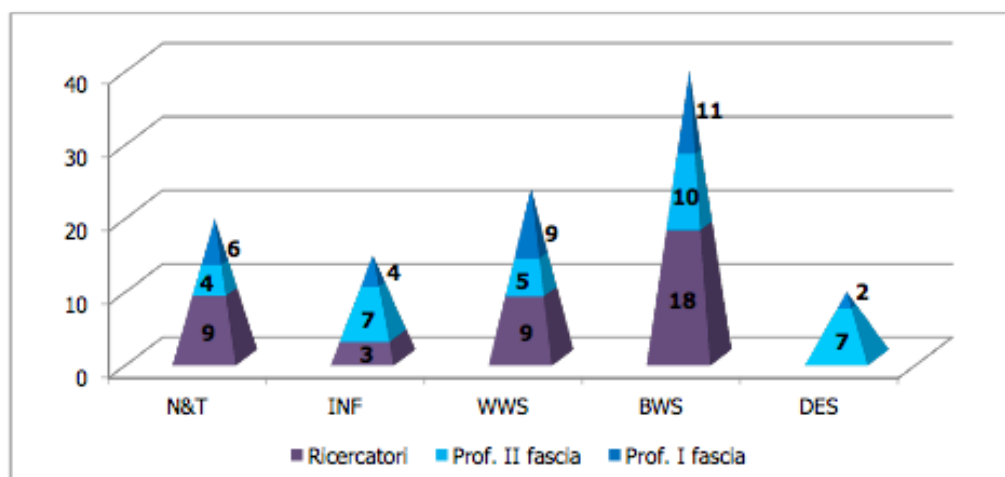
2.2.1 SITUAZIONE ATTUALE

Al 1 gennaio 2013 risultano occupati alla Libera Università di Bolzano 104 professori e ricercatori di ruolo, a cui vanno aggiunti altri 59 ricercatori a tempo determinato, calcolati solo tra coloro che vengono finanziati con fondi interni.

La tabella seguente ed il successivo grafico rappresentano l'attuale suddivisione del personale accademico di ruolo per facoltà.

Situazione al 01/01/2013	N&T	INF	WWS	BWS	DES	LUB
Prof. I fascia	6	4	9	11	2	32
Prof. II fascia	4	7	5	10	7	33
Ricercatori di ruolo	9	3	9	18	0	39
Totale	19	14	23	39	9	104
Studenti	225	264	902	1.535	235	3.375*
Studenti Prof. I e II fascia	22,5	24	64,5	73	26	52
Studenti Prof. I e II fascia + Ricercatori	12	19	39	39	26	32

*inclusi gli studenti dello Studio Generale e gli studenti senior



Nella seguente tabella viene illustrata la suddivisione dei ricercatori a tempo determinato finanziati con fondi interni.

Situazione al 01/01/2013	N&T	INF	WWS	BWS	DES	LUB
RTD	5	16	18	14	6	59

2.2.2 SVILUPPO

Per ciascuna facoltà viene effettuata una pianificazione mirata del personale, che prevede la copertura delle principali discipline di ciascuna facoltà. Le singole pianificazioni vengono discusse regolarmente con il rispettivo gruppo dei Mentori ed impostate tenuto conto delle tendenze nazionali ed internazionali. Nell'assunzione del personale accademico i Presidi assumono una responsabilità centrale e con il supporto del Rettore propongono al Consiglio dell'Università l'assunzione del personale docente nell'ambito delle pianificazioni approvate.

Per il consolidamento dei punti centrali nella didattica e nella ricerca, nonché per l'attivazione dei programmi di studio pianificati, è indispensabile una maggiore quota di corpo docente di ruolo. È pertanto pianificato che nei prossimi tre anni vengano assunti complessivamente 16 professori di I fascia, 22 professori di II fascia, e 46 ricercatori con contratto a tempo determinato.

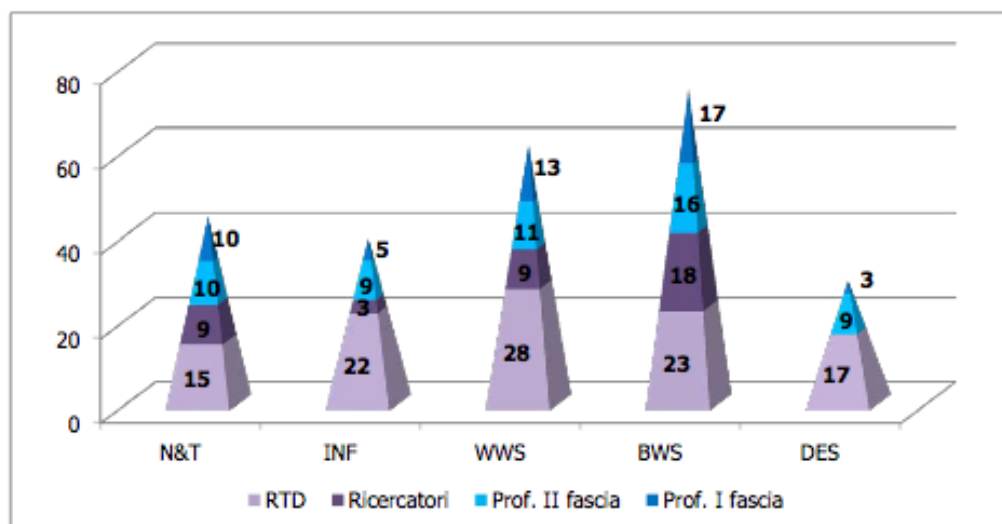
Nella seguente tabella è riportato il piano delle assunzioni per facoltà (nel suo sviluppo temporale):

	N&T			INF			WWS			BWS			DES			LUB		
	2013 2014	2015	2016	2013 2014	2015	2016	2013 2014	2015	2016	2013 2014	2015	2016	2013 2014	2015	2016	2013 2014	2015	2016
Prof. I fascia	1	2	1	1			3	1		4	2		1			10	5	1
Prof. II fascia	3	2	1			2	4	2		3	1	2		2		10	7	5
RTD	7	2	1	6			4	3	3	3	5	1	5	6		25	16	5
Totale	11	6	3	7	0	2	11	6	3	10	8	3	6	8	0	45	28	11

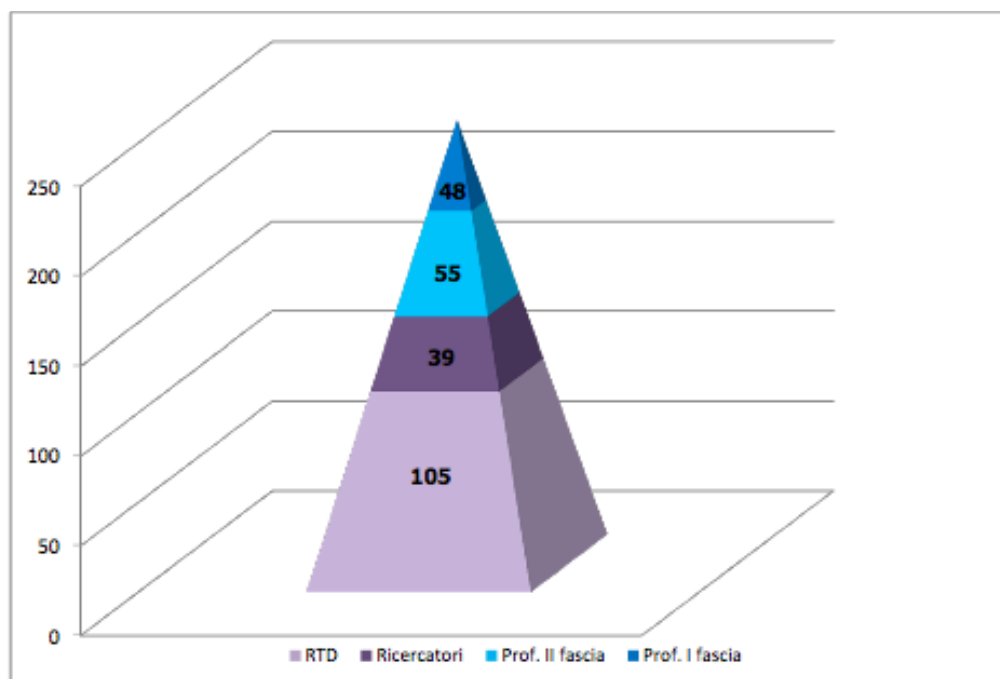
Alla fine del 2016 la situazione nelle singole facoltà sarà la seguente:

Fine 2016	N&T	INF	WWS	BWS	DES	LUB
Prof. I fascia	10	5	13	17	3	48
Prof. II fascia	10	9	11	16	9	55
Ricercatori	9	3	9	18	0	39
RTD	15	22	28	23	17	105
Totale	44	39	61	74	29	247

Che può essere rappresentata graficamente nel modo seguente:



A livello d'Ateneo alla fine del 2016 dovrebbero essere attivi almeno 48 professori di prima fascia, 55 professori di seconda fascia, 39 ricercatori e 105 ricercatori a tempo determinato:



2.2.3 CARRIERA INTERNA

La "Legge Gelmini" (legge n. 240/2010) prevede inoltre la possibilità di carriera interna per il personale accademico. L'Università elaborerà appositi criteri per l'avanzamento del personale accademico.

La tabella seguente indica per quante posizioni è stata prevista la carriera interna dalle singole facoltà.

	N&T	INF	WWS	BWS	DES	LUB
Prof. I e II fascia	2	2	3	7	1	15

I dati di cui sopra mostrano il numero indicativo di posizioni complessivamente previste per il passaggio da professori di II fascia a professori di I fascia, nonché per i ricercatori (di ruolo e a tempo determinato senior) a professori di II fascia.



2.2.4 SVILUPPO STRATEGICO

Per lo sviluppo strategico delle facoltà, dei centri di competenze e per nuove iniziative, il Presidente in accordo con il Rettore può approvare chiamate di professori di I o II fascia, nonché ricercatori mediante il fondo per nuove iniziative (Lettera F – Budget delle prestazioni 2014-2016).

2.3 RICERCA

2.3.1 SITUAZIONE ATTUALE

In coerenza con le strategie delineate al paragrafo 1.2, le facoltà hanno definito le macroaree di ricerca, all'interno delle quali si concentreranno principalmente.

Segue un elenco dei punti chiave della ricerca delle singole facoltà:

- Facoltà di Scienze e Tecnologie

Macroarea di ricerca	Responsabile scientifico
Produzione agrarie e tecnologie alimentari	<i>Fabrizio Mazzetto</i>
Gestione dell'ambiente montano	<i>Stefan Zerbe</i>
Metodi e tecnologie ingegneristiche per l'innovazione dei prodotti e dei processi	<i>Dominik Matt</i>
Risorse energetiche ed efficienza energetica	<i>Andrea Gasparella</i>

- Facoltà di Scienze e Tecnologie informatiche

Macroarea di ricerca	Responsabile scientifico
CASE – Centre for Applied Software Engineering	<i>Giancarlo Succi</i>
IDSE – Information and Database Systems Engineering	<i>Francesco Ricci</i>
KRDB - Research Centre for Knowledge and Data	<i>Enrico Franconi</i>

- Facoltà di Economia

Macroarea di ricerca	Responsabile scientifico
Innovation und Unternehmensführung	<i>Christian Lechner</i>
Financial Markets and Regulation	<i>Maurizio Murgia</i>
Tourism, Marketing and Regional Development	<i>Oswin Maurer</i>
Law, Economics and Institutions	<i>Stefania Baroncelli</i>
Quantitative methods and economic modeling	<i>Fabrizio Durante</i>

- Facoltà di Scienze della Formazione

Macroarea di ricerca	Responsabile scientifico
Processi/progetti educativi e di sviluppo nelle differenti età e contesti di vita	<i>Liliana Dozza</i>
Lingue e linguaggi per una società multiculturale e plurilingue	<i>Rita Franceschini</i>
Dinamiche sociali, coesione, cittadinanza e sistemi di solidarietà	<i>Susanne Eisen</i>
Centro di studi e documentazione sulla storia della formazione in Alto Adige	<i>Annemarie Augschöll</i>



- Facoltà di Design e Arti

Macroarea di ricerca	Responsabile scientifico
Cultura visuale e il suo impatto sulla società	<i>Antonio Benincasa</i>
Fenomeni, processi e risultati del lavoro di progettazione tridimensionale	<i>Roberto Gigliotti</i>
Teorie, forme e linguaggi del Design	<i>Gerhard Glüher</i>
Arte e Pittura	<i>n.d.</i>

2.3.2 SVILUPPO

Ricerca e tecnologia in Alto Adige devono essere ricondotte in una nuova dimensione, al fine di incrementare il tasso d'innovazione della provincia, di promuovere l'integrazione dal punto di vista del sociale e della sostenibilità, di creare posti di lavoro in campo scientifico e di portare alcune aree fondamentali della ricerca a livelli internazionali di vertice. L'Università, l'EURAC, il TIS, il Centro di sperimentazione di Laimburg, il Fraunhofer, il BLS e gli imprenditori altoatesini sono i principali attori che si muovono nel campo della ricerca e della tecnologia. Parallelamente alla definizione di chiari ambiti di ricerca, come auspicato dallo studio AQA, un miglior coordinamento di queste istituzioni renderà disponibile un significativo potenziale di crescita. Oltre all'ulteriore sviluppo di alcuni centri di competenza, obiettivo della ricerca è di individuare in ogni facoltà un limitato numero di aree di ricerca. A tal fine sono già stati nominati in ogni facoltà dei coordinatori scientifici e, grazie ad una intensa collaborazione dei ricercatori ed in linea con gli ambiti di ricerca già esistenti in Alto Adige, sono state definite le tematiche.

A livello d'Ateneo sono stati individuati i seguenti ambiti:

- Ambiente e società
- Agricoltura, alimentari ed economia nelle regioni montane
- Energia, tecnologia e innovazione
- Teoria, didattica e metodi per la formazione permanente
- Formazione degli insegnanti del settore primario e secondario, nonché sviluppo e assistenza della prima infanzia

Obiettivo dello sviluppo della ricerca alla Libera Università di Bolzano è, grazie ad un efficiente management della ricerca ed un supporto nell'avvio dei progetti di ricerca (per esempio per grandi progetti EU), far progredire in primis la ricerca di base di qualità e promuovere la ricerca inter- e transdisciplinare. Con riferimento alle tematiche d'interesse per il territorio, come per esempio l'agricoltura sostenibile, l'energia, il cambiamento climatico nella regione a sud delle Alpi, e lo sviluppo e la trasformazione delle società multiculturali, si continuerà a sviluppare ricerca applicata in cooperazione con i rispettivi stakeholder.

Il trasferimento tecnologico e la prosecuzione dei risultati della ricerca nell'industria e nella pratica avvengono grazie alle imprese. Nell'Ateneo un coordinatore accompagnerà lo sviluppo delle imprese spin-off con il territorio, al fine di promuovere, in collaborazione stretta con il TIS, la rete locale ed internazionale tra università, imprese e centri di ricerca internazionali. Si raggiungerebbe, così, una efficiente trasposizione sul territorio dei risultati derivanti dall'attività di ricerca e sviluppo, mettendo gli stessi a disposizione sia di imprenditori high-tech che delle piccole e medie imprese. Riassumendo, si possono elencare i principali obiettivi dello sviluppo della ricerca alla LUB sono i seguenti:

- Incremento delle attività nella ricerca di alta qualità, come da standard scientifici internazionali
- Incremento dell'acquisizione di fondi terzi, tra cui anche UE



- Ulteriore collegamento con gli enti di ricerca in Alto Adige e con le vicine Università di Innsbruck e Trento (per es. attraverso dottorati di ricerca comuni)
- Incremento del networking internazionale nella ricerca e integrazione della Libera Università di Bolzano nelle reti di ricerca esistenti
- Sviluppo dei corsi di dottorato (eventualmente all'interno di una scuola di phd interateneo), promozione del trasferimento tecnologico e spin-off e start-up d'impresa
- Ottimizzazione delle strutture interne dedicate alla ricerca (Servizio per la ricerca e innovazione), che accompagna attivamente e con competenza tutte le fasi, dalla presentazione della proposta, all'esecuzione del progetto di ricerca fino alla diffusione dei risultati
- Valutazione interna della ricerca
- Promozione e visibilità della ricerca della Libera Università di Bolzano, attraverso la diffusione dei risultati della ricerca a livello locale, nazionale ed internazionale.

2.4 INFRASTRUTTURE

2.4.1 SITUAZIONE ATTUALE

La Libera Università di Bolzano è suddivisa su tre sedi:

- Bolzano
- Bressanone
- Brunico

A Bolzano l'Ateneo dispone di quattro edifici:

- Sede centrale, Piazza Università 1
- Direttivo Universitario, Piazzetta Franz Innerhofer 8
- Palazzo K, Piazza Università 5
- Ex palazzo delle Poste, Piazza Domenicani 3

La sede principale di Piazza Università dispone di una superficie netta di 39.486 m². Attualmente vi si trovano la mensa universitaria, il bar, la biblioteca universitaria, i laboratori della Facoltà di Scienze e Tecnologie, le officine della Facoltà di Design e Arti, le segreterie delle facoltà e gli uffici dei docenti delle Facoltà di Economia e Design e Arti, gli uffici dei servizi per gli studenti, gli uffici dei servizi dei settori ICT & Servizio tecnico, il Centro di competenze Lingue, aule di diverse dimensioni, sale PC, così come aule tecniche, magazzini e archivi.

L'edificio di Piazzetta Franz Innerhofer 8 dispone di una superficie netta di 2.187 m². Vi si trovano la Presidenza, il Rettorato, la Direzione universitaria e i servizi amministrativi.

L'edificio di Piazza Università 5 dispone di una superficie netta di 2.334 m². Vi alloggiano la segreteria della facoltà e gli uffici dei docenti della Facoltà di Scienze e Tecnologie.

L'edificio di Piazza Domenicani 3 dispone di una superficie netta di 2.239 m². È occupato dalla segreteria della facoltà e dagli uffici dei docenti della Facoltà di Scienze e Tecnologie informatiche.

A Bressanone l'Ateneo dispone di tre edifici:

- Edificio principale, Viale Ratisbona 16
- ex. Edificio „Raika“, Via Santa Croce 7
- Casa Missionaria, Viale Ratisbona 24

L'edificio principale di Viale Ratisbona 16 dispone di una superficie netta di 19.589 m². Vi si trovano la mensa universitaria, la biblioteca universitaria, i laboratori, gli uffici dei docenti della facoltà di Scienze



della Formazione, gli uffici dei servizi agli studenti, gli uffici dei servizi ICT e del servizio tecnico, aule per le lezioni, sale computer, sale tecniche, magazzini e archivi.

L'edificio di Via Santa Croce 7 dispone di una superficie netta di 1.178 m². È qui ubicata la segreteria della Facoltà di Scienze della Formazione, nonché alcune sale riunioni.

L'edificio in Viale Ratisbona 24 si estende su una superficie netta di 1.539 m². Vi si trova il Centro documentazione, l'officina, il laboratorio didattico, alcune aule, alcuni uffici docenti e alcuni magazzini.

A Brunico l'Ateneo dispone di un edificio:

- Edificio principale, Piazza Università 1

L'edificio principale di Piazza Università 1 dispone di una superficie netta di 1.516 m². Vi si trovano la segreteria di facoltà e gli uffici dei docenti del corso di laurea in „Management del turismo, dello sport e degli eventi“ della Facoltà di Economia, aule, sale computer, sale tecniche, magazzini ed archivi.

2.4.2 SVILUPPO

Per poter realizzare gli obiettivi descritti nel campo della didattica, del personale e della ricerca, l'Università necessita nei prossimi anni di nuove infrastrutture.

Per soddisfare il fabbisogno di spazi a Bolzano per l'anno 2014 è disponibile l'ex edificio delle dogane in Via Cassa di Risparmio con una superficie netta di ca. 1.500 m². L'amministrazione provinciale ha già comunicato il proprio assenso per questo edificio. Qui troveranno spazio i nuovi laboratori della Facoltà di Scienze e Tecnologie e fino a circa 24 uffici per docenti delle Facoltà di Scienze e Tecnologie ed Economia.

Anche nell'anno 2015 sarà necessario disporre di ulteriori edifici. Risulta adeguato l'attuale edificio della Regione di piazza Università 3 con una superficie netta di ca. 1.500 m². Qui dovrebbe sorgere la casa degli studi, con l'obiettivo di concentrare in un unico edificio tutti gli uffici per il servizio agli studi.

Per poter soddisfare il fabbisogno di spazio a Bressanone per l'anno 2014 e 2015, l'Università dovrebbe disporre di aule e laboratori didattici. Risulterebbe adatta una nuova costruzione nel campo dell'attuale Casa Missionaria San Giuseppe, dove potrebbero essere attrezzate alcune aule, laboratori didattici, uffici per il personale accademico e aule seminario, che non trovano spazio nella sede centrale.

Anche a Brunico si rende necessario un ampliamento dei locali per l'anno 2014. Risulta adeguato l'ampliamento, per altro già appaltato dall'Amministrazione provinciale, degli attuali locali del Corso di studio in „Management del turismo, dello sport e degli eventi“ della Facoltà di Economia di ca. 400 m² e la possibilità di disporre di ca. 1.000 m² nell'edificio della nuova biblioteca per il collocamento della biblioteca universitaria.



La seguente tabella riassume lo stato attuale delle infrastrutture ed il relativo fabbisogno:

attuale	fabbisogno
Bolzano	
Sede principale , Piazza Università 1: 39.486m ² Rettorato , Piazzetta Franz Innerhofer 8: 2.187m ² Palazzo K , Piazza Università 5: 2.334m ² Palazzo ex-Posta , Piazza Domenicani 3: 2.239m ² Totale: 46.246m ²	2014 Palazzo ex- Dogana: 1.559m ² <ul style="list-style-type: none"> • laboratori • uffici per N&T e WWS 2015 Palazzo della Regione: ca.1.500m ² <ul style="list-style-type: none"> • Casa degli Studi • 1 Centro di competenza Totale: 49.305m ²
Bressanone	
Sede principale , Viale Ratisbona 16 : 19.589m ² Palazzo ex-Cassa Rurale , Via S. Croce 7: 1.178m ² Casa Missionaria , Viale Ratisbona 24: 1.539m ² Totale: 22.306m ²	2014 Ampliamento Casa Missionaria: ca. 2.000m ² <ul style="list-style-type: none"> • aule insegnamento • laboratori didattici Ampliamento Biblioteca: ca. 500m ² Totale: 24.806m ²
Brunico	
Sede principale , Piazzetta Università 1: 1.516m ² Biblioteca: 800m ² Totale: 2.316m ²	2014 Ampliamento sede facoltà: 500m ² Totale: 2.816m ²



3 SVILUPPO DELLE FACOLTÀ

3.1 FACOLTÀ DI SCIENZE E TECNOLOGIE

3.1.1 DIDATTICA

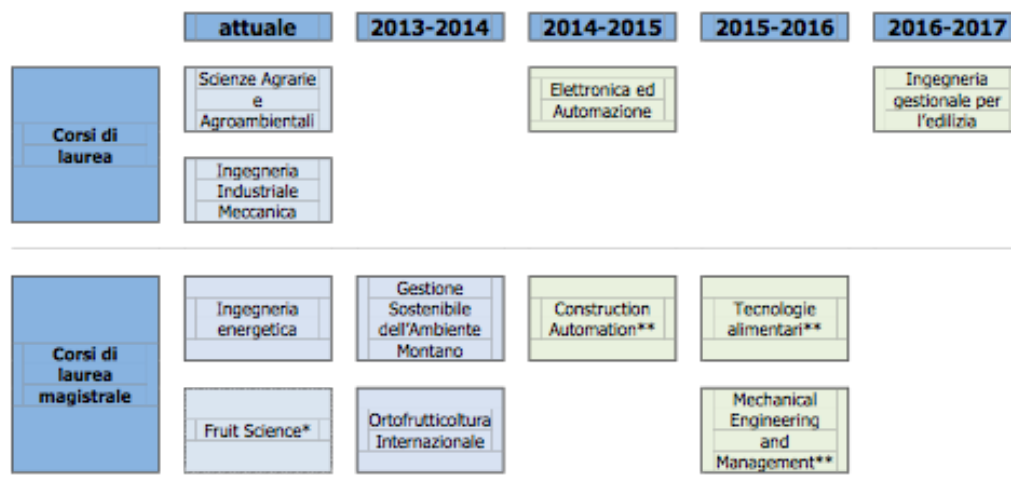
Alla Facoltà di Scienze e Tecnologie sono attualmente attivi due corsi di laurea, due corsi di laurea magistrale (il corso in Fruit Science verrà soppresso) e due dottorati di ricerca. Nell'anno 2013 verranno attivati due Corsi di laurea magistrale nel settore delle scienze agrarie. L'offerta formativa attuale comprende quindi sia nel settore agro-alimentare (un corso di laurea, due corsi di laurea magistrale, un Dottorato di ricerca) che nel settore dell'ingegneria meccanica (un corso di laurea, un corso di laurea magistrale, un Dottorato di ricerca) già tutti i livelli di studio.

Per l'anno accademico 2014/2015 è prevista l'istituzione di un corso di laurea in *Elettronica e Automazione* in collaborazione con la Facoltà di Scienze e Tecnologie informatiche, e per l'anno accademico 2016/2017 un corso di laurea in *Ingegneria gestionale per l'edilizia*.

Nel prossimi anni è prevista l'attivazione delle seguenti lauree magistrali in cooperazione con università estere: nell'anno accademico 2014/2015 un corso in *Construction Automation* in collaborazione con la Facoltà di Scienze e Tecnologie informatiche, nell'anno accademico 2015/2016 è prevista l'attivazione di un corso di laurea magistrale in *Tecnologie alimentari* ed uno in *Mechanical Engineering and Management*.

L'attivazione definitiva di ogni nuovo corso dipenderà dal risultato dell'analisi del fabbisogno da svolgere in collaborazione con l'IRE della Camera di Commercio di Bolzano.

La seguente rappresentazione grafica fornisce un quadro generale dello sviluppo dell'offerta formativa presso la Facoltà:





Dottorati di ricerca	Mountain Environment and Agriculture
	Sustainable Energy and Technologies

* ad esaurimento
**European Master

3.1.2 PERSONALE

3.1.2.1 Situazione attuale

Alla Facoltà di Scienze e Tecnologie lavorano al 1 gennaio 2013 19 professori e ricercatori di ruolo e 5 ricercatori a tempo determinato.

La seguente tabella illustra la suddivisione dei 19 professori e ricercatori di ruolo nei diversi settori scientifico-disciplinari.

Area	S.S.D.	Prof. I fascia	Prof. II fascia	Ricercatori	Totale
Area 07 - Scienze agrarie e veterinarie	AGR/01		1		1
	AGR/03	1		1	2
	AGR/05		1		1
	AGR/08			1	1
	AGR/09	1			1
	AGR/11			1	1
	AGR/13	1			1
	AGR/15		1		1
	AGR/16			1	1
	Totale	3	3	4	10
Area 05 - Scienze biologiche	BIO/03	1	0	0	1
Area 03 - Scienze chimiche	CHIM/06	0	0	1	1
Area 09 - Ingegneria industriale e dell'informazione	ING-IND/11		1	1	2
	ING-IND/16	1		1	2
	Totale	1	1	2	4



Area 01 - Scienze matematiche e informatiche	MAT/05			1	1
	MAT/07	1			1
	Totale	1	0	1	2
Area 13 - Scienze economiche e statistiche	SECS-S/02	0	0	1	1
	Totale	6	4	9	19

La seguente tabella illustra invece la suddivisione nei settori scientifico-disciplinari dei 5 ricercatori a tempo determinato.

Area	S.S.D.	RTD
Area 07 - Scienze agrarie e veterinarie	AGR/03	1
	AGR/13	1
	Totale	2
Area 09 - Ingegneria industriale e dell'informazione	ING-IND/08	1
	ING-IND/13	1
	ING-IND/32	1
	Totale	3
Totale		5

3.1.2.2 Sviluppo

La strategia di reclutamento nei prossimi anni vede la Facoltà impegnata nella copertura delle posizioni all'interno dei settori scientifico-disciplinari mancanti, necessari per raggiungere i "requisiti di docenza" dei nuovi corsi di laurea e per rafforzare le aree prioritarie della ricerca. Si cerca inoltre di rafforzare il profilo internazionale della Facoltà.

La seguente tabella illustra le assunzioni pianificate per i prossimi anni:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
Prof. I fascia	AGR/19*		1		1
	ICAR/12**	1			1
	ING-IND/13 o 14		1		1
	Non definito			1	1
	Totale	1	2	1	4



Prof. II fascia	AGR/12		1		1
	ING-IND/08			1	1
	ING-IND/13	1			1
	ING-IND/14	1			1
	ING-IND/17	1			1
	ING-IND/32		1		1
	Totale	3	2	1	6
Totale		4	4	2	10

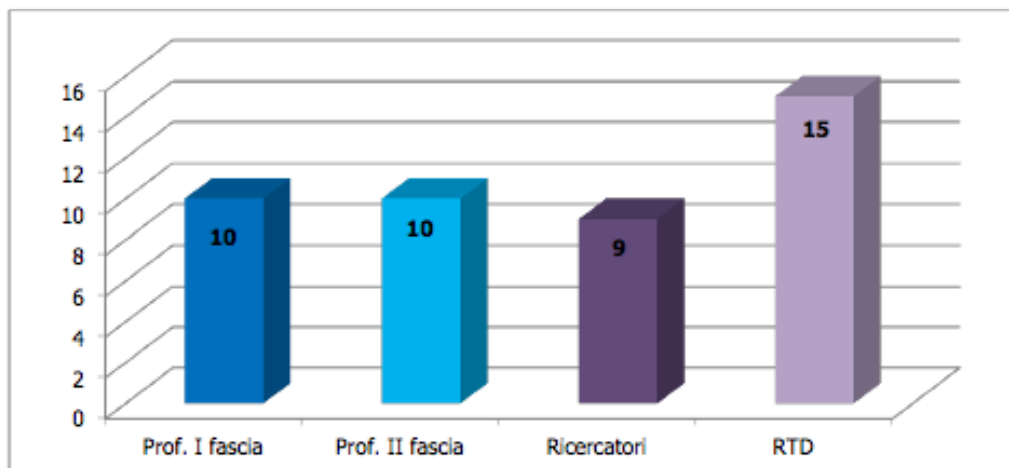
*La facoltà dispone già di un budget per una posizione di II fascia nel SSD AGR/19. Si tratta quindi di una trasformazione in una posizione di I fascia.

**Sostituzione causa pensionamento

La seguente tabella indica le assunzioni previste di ricercatori con contratto a tempo determinato:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
RTD	AGR/01		1		1
	AGR/05			1	1
	AGR/09		1		1
	AGR/15	1			1
	AGR/19	1			1
	ING-IND/14	1			1
	ING-IND/15	1			1
	ING-IND/16	1			1
	ING-IND/35	1			1
	MAT/09	1			1
Totale		7	2	1	10

Alla fine del triennio la Facoltà presenta la seguente situazione:



Per quanto concerne la carriera interna, sono previste complessivamente 2 posizioni per il passaggio da professore di II fascia a professore di I fascia nonché di ricercatore o ricercatore a tempo determinato (tipo B) a professore di II fascia. Presupposto è il conseguimento dell'abilitazione scientifica nazionale e la coerenza con le esigenze della Facoltà nella didattica e nella ricerca.

3.1.3 RICERCA

La Facoltà ha identificato 4 punti chiave sui quali si concentra la maggior parte dell'attività di ricerca. Tuttavia è ritenuto fondamentale che nelle conoscenze di base della fisica, della matematica, della chimica e della statistica possano essere proseguite le attività di ricerca nell'ambito dei punti chiave già definiti. Gli aspetti prioritari della Facoltà sono il reperimento di fondi terzi per la ricerca e la qualità della produzione scientifica.

Segue una breve descrizione dei 4 punti chiave della ricerca:

Produzione agrarie e tecnologie alimentari (*F. Mazzetto*)

Il focus copre studi lungo l'intera filiera agricola, dalla produzione, alla trasformazione di alimenti ed ai consumi alimentari. Particolare enfasi viene data alla sostenibilità delle tecniche produttive, all'aumento dell'efficienza d'uso delle risorse, alle nuove tecnologie di trasformazione alimentare, alla qualità dei prodotti di origine montana e alla loro tracciabilità.

I principali filoni di ricerca sono i seguenti:

- Fertilità del suolo e nutrizione minerale delle colture;
- Ciclo del carbonio, C-footprint e impiego di energia nella produzione agricola
- Interazioni tra piante- insetti e microrganismi;
- Meccanizzazione agricola, sicurezza ed ergonomia nei processi di produzione, agricoltura di precisione e Information Management;
- Qualità e tracciabilità degli alimenti di origine montana;
- Trasformazione degli alimenti e nanotecnologie;
- Marketing alimentare e comportamento dei consumatori



La maggior parte di tali linee di attività rientrano negli obiettivi strategici che si stanno delineando nell'ambito del TechnoPark. Le strategie di reperimento esterno di risorse, pertanto, si concentreranno molto anche su tale fronte. Tuttavia, si intende anche proseguire con un approccio di delocalizzazione e internazionalizzazione della ricerca, confermando l'intenzione di portare avanti proposte di studio su fondi ministeriali e comunitari, nonché di ampliare i contatti con il settore privato per promuovere iniziative di innovazione e trasferimento tecnologico a livello sia locale sia nazionale.

Gestione dell'ambiente montano (*S. Zerbe*)

La montagna è un ambiente sensibile e particolarmente vulnerabile ai cambiamenti causati dall'uomo. La gestione sostenibile dello sviluppo delle aree montane deve basarsi sulla conoscenza della vulnerabilità di tale ambiente e della sua adattabilità a cambiamenti naturali e di quelli socio-economici. Quest'area di ricerca si pone l'obiettivo di studiare sia a scala locale che a scala globale gli effetti del disturbo di origine naturale e antropica sul funzionamento di ecosistemi terrestri e acquatici. Vengono inoltre studiati aspetti di base e di tipo applicativo del ripristino degli ecosistemi e dell'uso sostenibile delle risorse.

Le principali tematiche di ricerca sono le seguenti:

- Funzionamento degli ecosistemi e cambiamento climatico;
- Ripristino degli ecosistemi;
- Servizi ecosistemici e economia ambientale;
- Dinamiche fluviali e mitigazione dei rischi ambientali;
- Caratterizzazione e funzionamento delle comunità microbiche e di insetti;
- Produttività delle foreste.

Questa macroarea verrà sviluppata anche nella direzione di un approccio multidisciplinare, integrando competenze anche di tipo ingegneristico, economico e sociologico.

Metodi e tecnologie ingegneristiche per l'innovazione dei prodotti e dei processi (*D. Matt*)

Il focus studia l'ottimizzazione tecnica e organizzativa di tecnologie e processi di con l'obiettivo di ottenere miglioramenti della qualità e dell'ergonomia, nonché una riduzione dei costi e dei tempi. Si presta attenzione alla progettazione e l'utilizzo di tecnologie di gestione in particolare nel contesto delle piccole e medie imprese industriali, edili e agricole.

Argomenti:

- Innovation Management e Metodi
- Design per l'ambiente e Life Cycle Assessment di processi industriali
- Sistemi di Produzione snella e agile
- Meccatronica e tecniche intelligenti per la produzione industriale
- Materiali e Ingegneria di produzione
- Approcci dell'Ingegneria Industriale alle reti di collaborazione nel settore edile

Risorse energetiche ed efficienza energetica (*A. Gasparella*)

L'introduzione di uno stile di vita sostenibile che combina protezione dell'ambiente e miglioramento sociale ed economico rappresenta una sfida che si coniuga con un migliore sfruttamento delle risorse energetiche. I due paradigmi classici dell'efficienza energetica nei processi di produzione, utilizzo e



distribuzione dell'energia e della sostituzione dei carburanti tradizionali con fonti energetiche rinnovabili sono qui considerati in stretta relazione con la realtà locale del territorio montano dell'Alto Adige. Pertanto, le attività di ricerca riguardano, da un lato, la gestione delle risorse energetiche rinnovabili e le tecnologie di produzione e, dall'altro, l'efficienza energetica negli edifici e nei sistemi di produzione.

I principali argomenti di ricerca sono:

- Analisi delle prestazioni energetiche dell'involucro edilizio e dei sistemi di climatizzazione (HVAC);
- Gestione delle risorse energetiche rinnovabili;
- Tecnologie di produzione dell'energia;
- Efficienza energetica nei processi produttivi.



3.1.4 INVESTIMENTI

3.1.4.1 Settore didattico

Nel settore ingegneristico la Facoltà necessita di laboratori nei campi della meccanica, della produzione, della logistica, e dell'energia nella misura di ca. 300m². A questo si aggiunge una spesa di 338.300 € per l'acquisto di attrezzatura tecnica.

Nel settore agro-ambientale sono necessari 420m² di laboratori, 160m² di spazi all'aperto presso l'area di Laimburg, e 1ha per le coltivazioni presso Laimburg. Sono altresì necessari 115.000€ di apparecchiature tecniche 150.000€ per spese di manutenzione.

I costi nel settore della didattica ammontano globalmente circa a 265.000€ oltre ad eventuali canoni di affitto.

Settore	Fabbisogno di spazi	Richieste di investimenti
Ingegneristico	300m ² laboratori	338.300€
Agro-ambientale	420m ² laboratori 160m ² spazio all'aperto Laimburg 1ha per coltivazione Laimburg	150.000€

3.1.4.2 Settore ricerca

Per l'esecuzione dell'attività di ricerca nei prossimi tre anni la Facoltà necessita di un investimento pari a 724.000€.

Segue una panoramica sulla ripartizione degli investimenti tra i quattro punti chiave della ricerca:

Macroarea di ricerca	Responsabile scientifico	Richieste di investimenti
Produzione agraria e tecnologie alimentari	F. Mazzetto	197.500€
Management dell'ambiente alpino	S. Zerbe	135.500€
Metodi e tecnologie per l'innovazione dei prodotti e dei processi.	D. Matt	265.000€
Risorse energetiche ed efficienza energetica	A. Gasparella	126.000€
Totale		724.000€



3.2 FACOLTÀ DI SCIENZE E TECNOLOGIE INFORMATICHE

3.2.1 DIDATTICA

Alla Facoltà di Scienze e Tecnologie informatiche sono attualmente attivi un corso di laurea, un corso di laurea magistrale e un dottorato di ricerca. L'offerta didattica attuale comprende dunque tutti e tre i livelli di studio.

Nell'anno accademico 2015/2016 sarà attivato il corso di laurea in *Business Informatics* in collaborazione con la Facoltà di Economia.

L'attuale corso di laurea magistrale in Informatica comprende due Curricula e due European Master (*Computational Logic, Software Engineering*). Allo scopo di impostare un'offerta formativa più stimolante, di reclutare un numero maggiore di studenti e per poter offrire un Joint Degree, la Facoltà intende attivare questi European Master come Corsi di Laurea magistrale autonomi. Questo non comporterebbe spese aggiuntive per l'Università.

La Facoltà prevede l'attivazione di un corso di laurea in Elettronica e Automazione in collaborazione con la Facoltà di Scienze e Tecnologie. In caso di attivazione, il corso di laurea si svolgerà presso la Facoltà di Scienze e Tecnologie.

L'attivazione definitiva di ogni nuovo corso dipenderà dal risultato dell'analisi del fabbisogno da svolgere in collaborazione con l'IRE della Camera di Commercio di Bolzano.

La seguente rappresentazione grafica illustra lo sviluppo dell'offerta didattica nella Facoltà:

	attuale	2013-2014	2014-2015	2015-2016
Corsi di laurea	Scienze e Ingegneria dell'Informazione			Business informatics
Corsi di laurea magistrale	Informatica		Computational Logic (EMCL)*	Software Engineering (EMSE)*
Dottorati di ricerca	Informatica			

*European Master



3.2.2 PERSONALE

3.2.2.1 Situazione attuale

Al 1 Gennaio 2013 alla Facoltà di Scienze e Tecnologie informatiche risultano in forza 14 professori e ricercatori di ruolo e 16 ricercatori a tempo determinato.

La seguente tabella indica la suddivisione dei 14 professori e ricercatori di ruolo nei diversi settori scientifico-disciplinari.

Area	S.S.D.	Prof. I fascia	Prof. II fascia	Ricercatori	Totale
Area 01 - Scienze matematiche e informatiche	INF/01	3	5	3	11
Area 09 - Ingegneria industriale e dell'informazione	ING-INF/04	1			1
	ING-INF/05		2		2
	Totale	1	2	0	3
Totale		4	7	3	14

La tabella seguente illustra invece la suddivisione per settore scientifico-disciplinare dei 16 ricercatori con contratto a tempo determinato.

Area	S.S.D.	RTD
Area 01 - Scienze matematiche e informatiche	INF/01	11
Area 09 - Ingegneria industriale e dell'informazione	ING-INF/01	1
	ING-INF/04	2
	ING-INF/05	2
	Totale	5
Totale		16

3.2.2.2 Sviluppo

Per garantire i "requisiti necessari" dell'offerta attuale e futura, devono essere assunti, nel periodo di riferimento, almeno 1 professore di I fascia e 2 professori di II fascia.



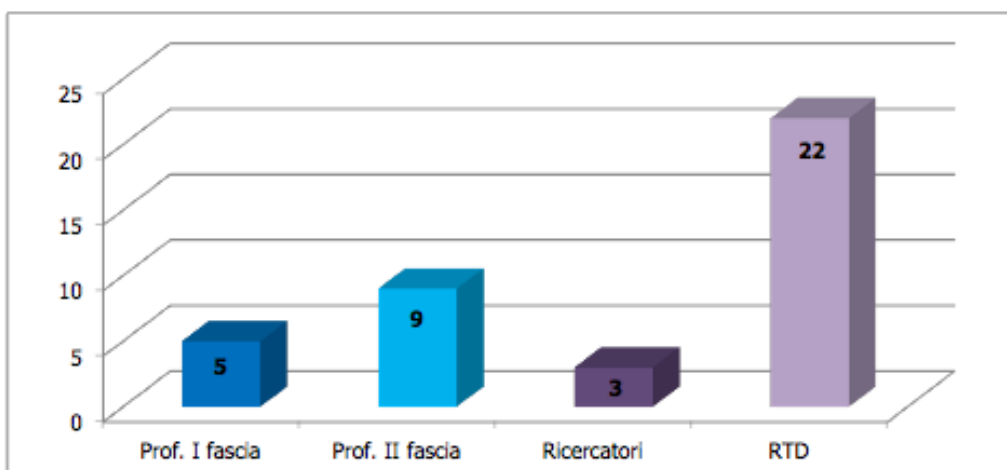
La tabella seguente illustra le assunzioni previste per i prossimi anni:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
Prof. I fascia	non definito	1	0	0	1
	MAT/05			1	1
Prof. II fascia	non definito			1	1
	Totale	0	0	2	2
Totale		1	0	2	3

La seguente tabella illustra le assunzioni previste di ricercatori con contratto a tempo determinato:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
RTD	non definito	6	0	0	6

Al termine del triennio la Facoltà presenta la seguente situazione:



Per quanto concerne la carriera interna, sono previste complessivamente 2 posizioni per il passaggio da professore di II fascia a professore di I fascia nonché di ricercatore o ricercatore a tempo determinato (tipo B) a professore di II fascia. Presupposto è il conseguimento dell'abilitazione scientifica nazionale e la coerenza con le esigenze della Facoltà nella didattica e nella ricerca.



3.2.3 RICERCA

L'attività di ricerca della Facoltà è strutturata su due dimensioni: la ricerca di base e lo sviluppo tecnologico.

Segue una breve descrizione dei tre punti chiave della ricerca:

CASE – Centro di Ingegneria del Software Applicata (*Giancarlo Succi*)

L'obiettivo del CASE (Centro di Ingegneria del Software Applicata) è quella di eccellere nella ricerca in Ingegneria del Software Applicata, connettendo il mondo accademico con l'industria e fornendo un ambiente di apprendimento unico agli studenti di Bachelor, Master e Dottorato.

Le aree di ricerca chiave del CASE sono:

- Metodi Agili e Lean Management
- Sviluppo Open Source
- Empirical Software Engineering e Software Engineering Knowledge Bases
- Formazione a Distanza in Ingegneria del Software
- Qualità del Software
- Software Product Lines
- Riutilizzo del Software e Component Based Development
- Metriche del Software
- Sviluppo di Sistemi Orientati ai Servizi
- Sistemi Mobili ed Integrati
- Sistemi Energy-aware

La strategia operativa del CASE è:

- Formare partnership con istituzioni di ricerca e sviluppo in Ingegneria del Software Applicata a livello locale, nazionale ed internazionale
- Creare un ambiente cooperativo per trasferire le conoscenze e le tecnologie avanzate all'industria locale attraverso le consulenze
- Partecipare progetti di ricerca a livello nazionale, europeo, ed internazionale
- Formare futuri ricercatori ed esperti in Ingegneria del Software

Nel prossimi tre anni puntiamo a migliorare lo stato dell'arte e a diffondere le soluzioni innovative in riviste scientifiche (come TSE, TOSEM, JSS, JSA, INS, ESE, ecc.) e in conferenze internazionali (ICSE, FSE, OSS, XP, MSR, SPLASH, SEKE, ICPC, ecc.) di alto livello.

Miriamo a pubblicare, in tre anni, 15 pubblicazioni su riviste internazionali e 30 lavori in atti di conferenze e workshop internazionali.

Obiettivi Scientifici Specifici

- Progettare e sviluppare sistemi mobili energy-aware
- Esaminare in che modo le misure software possano essere utilizzate per prendere decisioni di gestione
- Migliorare l'ambiente di sviluppo software dei produttori di sistemi embedded
- Indagare gli aspetti qualitativi di sistemi open source e approcci agili
- Analizzare il dominio per l'automazione dell'IT
- Definire e applicare processi di standardizzazione nel software testing



2014

- Studiare la possibilità di ricostruire il processo software attraverso la raccolta non invasiva di dati e la progettazione e lo sviluppo di strumenti di supporto
- Progettare e sviluppare strumenti per facilitare lo sviluppo di sistemi energy-aware
- Studiare tecniche per testare il software in diversi domini
- Integrare l'IT per l'automazione

2015 - 2016

- Sistemi mobili e adattabili
- Sistemi intelligenti e Horizon 2020
- Aspetti di qualità dell'IT per l'automazione
- Green Software Engineering

IDSE – Information and Database Systems Engineering (*Francesco Ricci*)

Il centro di ricerca IDSE (Information and Database Systems Engineering) si occupa di metodologie per la gestione di dati e informazioni che stanno alla base di applicazioni innovative *business critical* e che sfruttano grandi quantità di dati reali. L'attività di ricerca comprende ricerca di base, sviluppo di sistemi e valutazioni empiriche di sistemi informativi. Le aree di applicazione comprendono Sanità, e-Government, Formazione a Distanza, Turismo, e Agricoltura. Le soluzioni applicative che sono sviluppate in queste aree hanno l'obiettivo di essere trasferite ed utilizzate anche nello scenario locale, in collaborazione con industrie locali.

Nel prossimi tre anni puntiamo ad avanzare lo stato dell'arte e divulgare le nostre soluzioni innovative in riviste scientifiche di alto livello (quali ad esempio TODS, VLDBJ, IS, UMUAL, TIST, SOSYM, TSE, TOSEM) e in conferenze scientifiche internazionali (SIGMOD, VLDB, ICDE, EDBT, UMAP, RecSys, IUI, ECweb, SAC, ENTER, ICALT, ITICSE, SIGITE, ICSE).

Abbiamo in programma di pubblicare in 3 anni 20 articoli in Riviste Internazionali, e 60 articoli in atti di conferenze internazionali.

Obiettivi scientifici specifici

- Piano di sviluppo e attività per il sistema ospedaliero sviluppato nel progetto MOBAS (Sistema Informativo per Day Hospital);
- Sviluppo e utilizzo di un prototipo di Recommender System per l'Alto Adige per suggerire POI (Points of Interest) basato su dati contestuali;
- Progettazione e sviluppo di algoritmi efficienti per la definizione di itinerari in Alto Adige e Carinzia;
- Ricerca di base su *active learning* e tecniche di elicitazione delle preferenze;
- Raccolta dati ed analisi di attività online basate su *Extreme apprenticeship*;
- Analisi dei requisiti e dimostrazione di fattibilità di una piattaforma per l'analisi di dati spazio-temporali nel contesto dell'agricoltura altoatesina;
- Sviluppo di un approccio sistematico per la riduzione delle *feature* nei sistemi *value-based*;
- Sviluppo continuo della *Software factory* per didattica innovativa, ricerca sullo sviluppo di sistemi, e come incubatore di *start-up* sia locali sia internazionali;
- Sviluppo di uno schema per l'adozione del *cloud computing*, che evidenzia i benefici dell'adozione del cloud per organizzazioni locali ed internazionali.

2014

- Progettazione di un approccio integrato per generare raccomandazioni sequenziali in applicazioni di eHealth e di fruizione di contenuti multimediali;



- Ricerca di base su problemi di decisione sequenziali e sulle metodologie per cambiare gli stili di vita;
- Ricostruzione di processi didattici basata sull' *Extreme Apprenticeship*;
- Implementazione e utilizzo di un sistema per la pianificazione di itinerari per una piattaforma mobile;
- Accordo su una collaborazione a lungo termine con soggetti locali ed internazionali nell'area dell'analisi dei dati relativi all'agricoltura;
- Realizzazione di una cloud privata con finalità didattiche, utilizzando i più recenti dispositivi a bassissimo costo;
- Acquisizione di prerequisiti didattici e tecnologici in tema di formazione on-line di massa.

2015 - 2016

- Metodologie a supporto delle decisioni in contesti mobili e distribuiti;
- Ricerca di base su aspetti sociali delle decisioni e dell'espressione delle preferenze nello sviluppo di *recommender systems*;
- Integrazione di strumenti per la gestione semi-automatica di corsi basati su *Extreme Apprenticeship*;
- Sviluppo di prototipi per l'analisi dei dati in Agricoltura.

KRDB - Research Centre for Knowledge and Data (*Enrico Franconi*)

Strategia nella ricerca.

La strategia nella ricerca si basa su due punti principali: la ricerca di alto profilo, con importanti pubblicazioni peer-reviewed di fama internazionale, conferenze e riviste top-ranked, e la sinergia tra ricerca di base e ricerca applicata, anche rivolta alla realtà locale, che stimola ulteriormente la ricerca di base.

Le aree di ricerca da consolidare e ulteriormente ampliare sono:

- Gestione intelligente dei dati e delle informazioni, con particolare attenzione sulle sfide legate alle grandi quantità di dati. Settori specifici sono: l'accesso ai dati basato su ontologie, integrazione delle informazioni, la qualità dei dati, il recupero dei dati da web, il web semantico.
- I processi e dati di business, con l'obiettivo di studiare l'intero ciclo di vita dei processi, dalla fase di modellazione, all'esecuzione e all'analisi.

Campi di applicazione dei risultati della ricerca e delle tecnologie sviluppate in diversi contesti includono: gestione di dati e di processi nelle PMI, grandi aziende, e pubblica amministrazione; processi nel settore della sanità; apprendimento potenziato dalla tecnologia. Su queste aree di applicazione, il centro KRDB ha già stabilito contatti con attori locali, in particolare nei settori della sanità pubblica. Il centro KRDB è internazionalmente noto per i suoi risultati scientifici, attestati per esempio dai quattro progetti europei attualmente in esecuzione sulle nostre aree di interesse principali, e da ottimi indicatori della qualità della ricerca (come indice di citazioni e numero di pubblicazioni). Così, il centro KRDB mira a consolidare ulteriormente la sua eccellenza nella ricerca, per diventare un centro di riferimento a livello internazionale nelle linee di ricerca di cui sopra, anche al fine di attirare ricercatori di alta qualità che possono anche stabilire una sinergia con il territorio.

Strategia nella didattica.

Oltre alla partecipazione ai corsi generali di informatica offerti dalla facoltà, il centro KRDB è responsabile del Master Europeo di grande successo di Logica Computazionale (EMCL), e di un dottorato di ricerca europeo recentemente avviato sempre in Logica Computazionale (EPCL), entrambi in collaborazione con partner europei e non europei di fama internazionale. Il centro KRDB intende



proseguire e rafforzare il suo impegno verso l'EMCL e l'EPCL, al fine di attrarre un numero crescente di studenti di grande talento.

Allo stesso tempo, il centro KRDB vuole allargare il suo coinvolgimento per l'insegnamento nelle tematiche interdisciplinari e applicate, collegate alla propria ricerca, che siano, in particolare, cruciali per sostenere un eventuale curriculum in informatica aziendale (Business Informatics), sia a livello di laurea e che di laurea magistrale (ad esempio, la modellazione concettuale, la gestione dei sistemi informativi, la gestione dei processi aziendali, l'integrazione delle informazioni, i sistemi multi-agente, l'interazione uomo-computer). In questa luce, il centro KRDB prevede di indirizzare la sua offerta didattica specifica per soddisfare le esigenze provenienti da aziende locali e dalla pubblica amministrazione.

Si pianifica un consolidamento dei risultati scientifici in relazione sia con la gestione intelligente dei dati e delle informazioni, che con la tematica dei processi e dati, anche nel contesto dei progetti europei FP7 STREP ACSI e Terence, e attraverso la diffusione dei risultati conseguiti nel settore accademico, comunità industriale, scuole, così come tra il grande pubblico. Si prevede una attività di ingegnerizzazione delle tecnologie per l'accesso intelligente ai grandi basi di dati, e la creazione di contatti con parti interessate nella distribuzione di tali tecnologie negli ambienti industriali ed educativi, per esempio, Eriksson, Hogrefe.

2014

Si pianifica un ulteriore consolidamento dei risultati scientifici in relazione sia con la gestione intelligente dei dati e delle informazioni, che con la tematica dei processi e dati. E si pianifica un consolidamento di partner industriali e accademici, al fine di stabilire un forte consorzio per un nuovo progetto europeo sui processi e dati. In parallelo, prevediamo un rafforzamento delle competenze di ricerca in questo settore mediante assunzione e crescita interna, in sinergia con il contributo per l'offerta didattica in informatica aziendale. Faremo tentativi di attrarre fondi di ricerca sostanziali a sostegno di questa attività, e anche a sostegno di attività con parti interessate e attori nel mondo dell'istruzione. Lavoreremo per la diffusione di tecnologie per l'accesso intelligente alle grandi basi di dati in ambiente industriale, rafforzando allo stesso tempo il programma di master europeo EMCL iniettando le competenze e le esperienze acquisite dalla interazione con l'industria. Il personale acquisito per supportare la migrazione del programma EMCL verso un titolo congiunto porterà a ulteriori competenze nel settore della gestione intelligente dei dati.

2015 - 2016

Si pianifica un ulteriore consolidamento dei risultati scientifici in relazione sia con la gestione intelligente dei dati e delle informazioni, che con la tematica dei processi e dati.

3.2.4 INVESTIMENTI

3.2.4.1 Settore didattica

Non sono state fatte richieste di investimenti.

3.2.4.2 Settore ricerca

Per il settore della ricerca la Facoltà necessita di un laboratorio per „Human Computer Interaction“, vale a dire un locale di 45m² con attrezzature ICT e HCI pari a 75.000€.



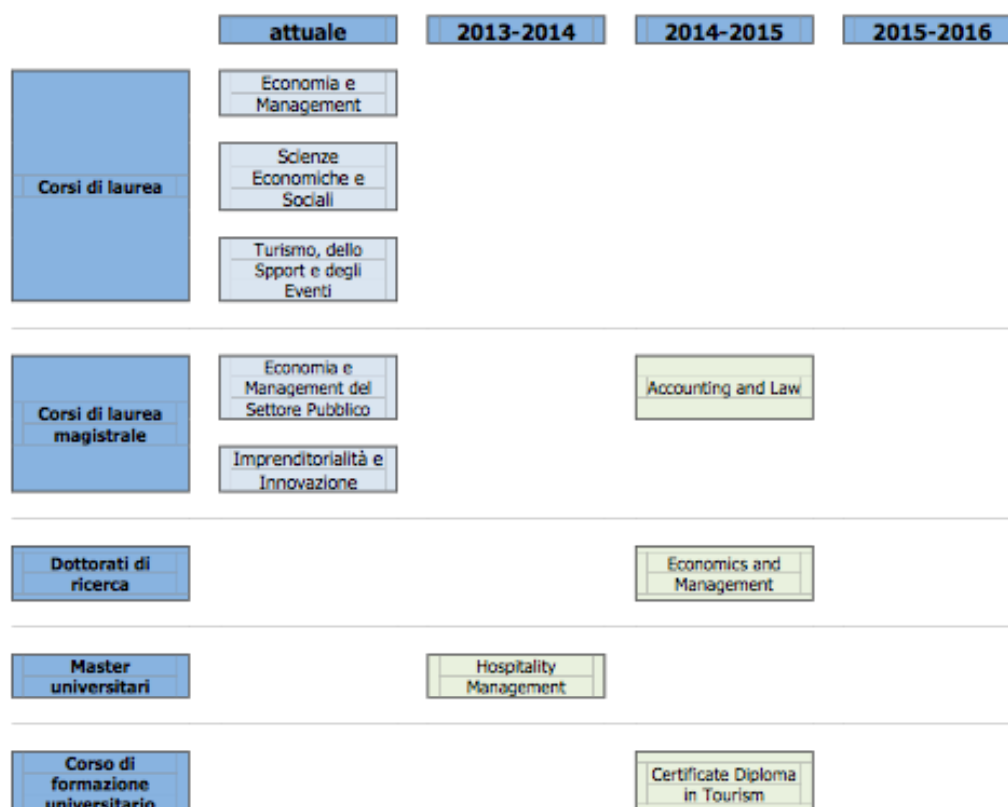
3.3 FACOLTÀ DI ECONOMIA

3.3.1 DIDATTICA

Alla Facoltà di Economia sono attualmente attivi tre corsi di laurea, di cui uno offerto nella sede universitaria di Brunico, e due corsi di laurea magistrali. Nell'anno accademico 2013/2014 sarà istituito un master universitario in *Hospitality Management* presso la sede di Brunico. Importante per la Facoltà è l'attivazione del dottorato di ricerca *Economics and Management* nell'anno accademico 2014/2015, con il quale la facoltà raggiunge un'offerta formativa per ogni livello di studio. Per l'anno accademico 2014/2015 è anche pianificata l'attivazione di un nuovo corso di laurea magistrale in *Accounting and Law* presso la sede di Bolzano e di un corso di formazione universitaria *Certificate Diploma in Tourism* presso la sede di Brunico. Nell'anno accademico 2015/2016 verrà anche attivato il corso di laurea in Business Informatics in collaborazione con la Facoltà di Scienze e Tecnologie informatiche presso cui si svolgerà.

L'attivazione definitiva di ogni nuovo corso dipenderà dal risultato dell'analisi del fabbisogno da svolgere in collaborazione con l'IRE della Camera di Commercio di Bolzano.

La seguente rappresentazione grafica illustra lo sviluppo dell'offerta didattica presso la Facoltà:





3.3.2 PERSONALE

3.3.2.1 Situazione attuale

Al 1 gennaio 2013 risultano impiegati presso la Facoltà di Economia 23 professori e ricercatori di ruolo e 18 ricercatori a tempo determinato.

La seguente tabella indica la suddivisione dei 23 professori e ricercatori di ruolo nei diversi settori scientifico-disciplinari.

Area	S.S.D.	Prof. I fascia	Prof. II fascia	Ricercatori	Totale
Area 07 - Scienze agrarie e veterinarie	AGR/01	0	1	0	1
	IUS/01		1		1
Area 12 - Scienze giuridiche	IUS/05	1		1	2
	IUS/09	1			1
	IUS/14			1	1
	Totale	2	1	2	5
Area 11 - Scienze storiche, filosofiche, pedagogiche e psicologiche	M-FIL/03	0	0	1	1
	SECS-P/01	1	2		3
Area 13 - Scienze economiche e statistiche	SECS-P/07	1		1	2
	SECS-P/08	2	1	1	4
	SECS-P/09	1		1	2
	SECS-P/11			1	1
	SECS-S/01			1	1
	SECS-S/06	1		1	2
	Totale	6	3	6	15
Area 14 - Scienze politiche e sociali	SPS/04	1	0	0	1
Totale		9	5	9	23



La seguente tabella indica invece la suddivisione dei 18 ricercatori con contratto a tempo determinato tra i diversi settori scientifico-disciplinari.

Area	S.S.D.	RTD
Area 09 - Ingegneria Industriale e dell'informazione	ING-INF/05	1
	IUS/04	1
	IUS/05	1
Area 12 - Scienze giuridiche	IUS/09	1
	IUS/12	1
	Totale	4
Area 10 - Scienze dell'antichità, filologico-letterarie e storico-artistiche	L-LIN/12	1
Area 11 - Scienze storiche, filosofiche, pedagogiche e psicologiche	M-FIL/03	1
	SECS-P/01	1
	SECS-P/02	1
	SECS-P/07	1
	SECS-P/08	3
Area 13 - Scienze economiche e statistiche	SECS-P/09	1
	SECS-P/11	1
	SECS-S/01	1
	SECS-S/03	1
	Totale	10
Area 14 - Scienze politiche e sociali	SPS/04	1
Totale		18

3.3.2.2 Sviluppo

Al fine di soddisfare i requisiti ministeriali per l'offerta didattica attuale e futura, di coprire i settori scientifici disciplinari attualmente scoperti, nonché per rafforzare i settori scientifico disciplinari scarsamente rappresentati, la facoltà assumerà nel periodo di riferimento 4 professori di I fascia e 6 professori di II fascia.



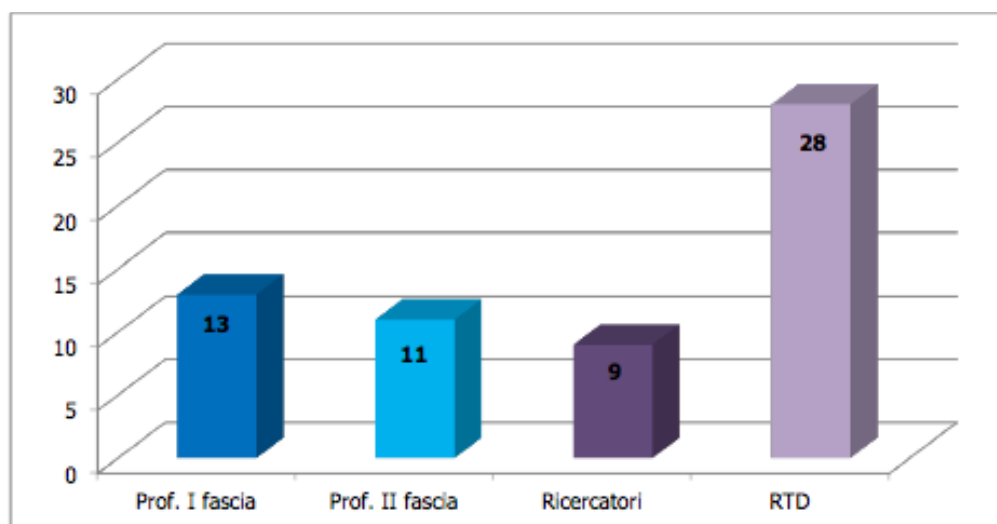
La tabella seguente fornisce un quadro generale delle assunzioni previste per i prossimi anni:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
Prof. I fascia	SECS-P/02	1			1
	SECS-P/03	1			1
	SECS-P/08	1	1		2
	Totale	3	1	0	4
Prof. II fascia	SECS-P/05	1			1
	SECS-P/07		1		1
	SECS-P/08	1			1
	SECS-P/10	1	1		2
	SECS-P/06				
	SECS-P/06	1			1
	Totale	4	2	0	6
Totale		7	3	0	10

La seguente tabella illustra l'assunzione prevista di ricercatori a tempo determinato:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
RTD	SECS-P/01			1	1
	SECS-P/01		1		1
	SECS-P/06				
	SECS-P/06	1		1	2
	SECS-P/07		1	1	2
	SECS-P/08	1	1		2
	SECS-P/06	1			1
	SPS/04	1			1
Totale		4	3	3	10

Al termine del triennio la Facoltà presenta la seguente situazione:



Per quanto concerne la carriera interna, sono previste complessivamente 3 posizioni per il passaggio da professore di II fascia a professore di I fascia nonché di ricercatore o ricercatore a tempo determinato (tipo B) a professore di II fascia. Presupposto è il conseguimento dell'abilitazione scientifica nazionale e la coerenza con le esigenze della Facoltà nella didattica e nella ricerca.

3.3.3 RICERCA

Dati lo sviluppo passato e la situazione attuale, la Facoltà ha due obiettivi nel campo della ricerca per il prossimo triennio:

- consolidare e rafforzare i gruppi informali di ricerca che si sono sviluppati spontaneamente nel passato
- aumentare la visibilità della ricerca effettuata in Facoltà, sia nell'ambito accademico internazionale che locale e regionale.

Tutte e cinque le macroaree di ricerca sono basate su un approccio multidisciplinare che ha caratterizzato molta della produzione dei membri della Facoltà sino ad ora.

Segue una breve descrizione delle 5 macroaree di ricerca:

Entrepreneurship and Innovation (*C. Lechner*)

Tematiche da approfondire nel prossimo triennio

- Imprenditorialità e innovazione come materie complesse
- Problemi derivanti da situazioni decisionali mal strutturate
- Innovazione sociale e imprenditorialità sociale
- Imprenditorialità e innovazione come sistema dinamico
- Imprenditorialità e innovazione come forma di internazionalizzazione
- Imprenditorialità e innovazione in aziende a conduzione familiare



Risultati attesi

- Stesura di un *position paper* che definisca il quadro teorico-epistemologico di riferimento e le caratteristiche dell'agenda di ricerca stabilita
- Richiesta di fondi di ricerca interni ed esterni
- Creazione di sinergie locali e internazionali (Università di Trento, Università di Innsbruck) per future collaborazioni scientifiche e progetti di ricerca congiunti
- Identificazione di un gruppo di *stakeholders* locali che promuovano imprenditorialità e innovazione in Alto Adige.
- Opportunità per gli studenti della Laurea Magistrale in Imprenditorialità e Innovazione di essere coinvolti nelle attività di ricerca (grazie alle tesi di laurea, alla partecipazione a seminari, ecc.)

Eventi

- Serie di seminari su innovazione sociale e imprenditorialità sociale

2014

Nuove tematiche

- Penetrazione del modello innovazione-imprenditorialità nel tessuto produttivo delle aziende altoatesine a conduzione familiare

Risultati attesi

- Istituzione di un Centro di Competenza per l'Imprenditorialità e l'Innovazione presso la Libera Università di Bolzano
- Istituzione di un osservatorio sulla penetrazione del modello innovazione-imprenditorialità nel tessuto produttivo delle aziende altoatesine a conduzione familiare (possibilmente nell'ambito dell'Euregio)
- Presentazione di relazioni in occasione di convegni internazionali e pubblicazione di saggi in riviste scientifiche internazionali a seguito di valutazione di addetti ai lavori

Eventi

- Seminario internazionale sul tema "Innovazione-imprenditorialità come circuito virtuoso autoalimentante"

2015 - 2016

Tematiche

- Quando gli intermediari aumentano le distanze del trasferimento di conoscenze: la dura vita dei *connectors*

Eventi

- Seminario internazionale su "Innovazione e reti"

Tourism, Marketing and Regional Development (O. Maurer)

Nei prossimi tre anni la ricerca dei membri del gruppo verterà su due aree distinte ma complementari, come descritto nel Documento Strategico della Facoltà:

- Ricerca fondamentale, elaborazione teorica, messa a punto della teoria e sviluppo del metodo
- Ricerca applicata, p. es. applicazioni di rilevanza regionale e internazionale

Tematiche

- Misurazione, osservazione empirica e modelli della Qualità della vita
- Cambiamento demografico e turismo



- Case vacanza di proprietà e scelta delle destinazioni turistiche
- Competitività e immagine delle destinazioni turistiche
- Studi di congruità e metodi per la misurazione
- Cicloturismo
- Marketing virale per la promozione di destinazioni turistiche
- Tecnologie per l'autosomministrazione di indagini tramite dispositivi mobili
- Turismo gastronomico
- Turismo e disoccupazione
- Prodotti regionali e turismo
- Adattamento dei modelli teorici di sviluppo regionale al contesto altoatesino sulla base della letteratura esistente e di idee innovative

Risultati attesi nel prossimo triennio

- Pubblicazioni in riviste indicizzate ISI/SCOPUS, pubblicazioni in volumi e/o atti di convegni con collocazione editoriale internazionale, presentazione dei risultati in consessi scientifici internazionali.
- Divulgazione dei risultati presso un pubblico più ampio, tanto a livello locale e regionale quanto a livello nazionale ed europeo.
- Applicazione dei modelli sviluppati a livello regionale (in termini di una nuova conoscenza dei contesti socio-economici regionali e delle loro implicazioni di carattere politico).

Eventi

- "Consumer Behaviour in Tourism Symposium" (CBTS, Simposio sul comportamento dei turisti)
- Seminario sull'Economia del turismo

2014

Nuove tematiche

- Mobilità turistica, seconde case e qualità della vita
- Passeggeri aeroportuali come consumatori
- Effetti del cambiamento demografico su sviluppo e gestione del settore turistico
- Seconda casa tra turismo e politiche abitative
- Effetti del turismo sulla qualità della vita dei residenti
- Modelli economici per le economie dipendenti dal settore turistico
- Analisi dei budget mentali dei turisti
- Elaborazione di analisi empiriche sui fattori trainanti dello sviluppo regionale, con particolare riferimento a sostenibilità, cooperazione e innovazione

Eventi

- "Consumer Behaviour in Tourism Symposium" (CBTS, Simposio sul comportamento dei turisti)
- Seminario sull'Economia del turismo
- Seminario sul tema "Seconda casa: tra consumi affluenti e lascito di famiglia"
- Seminario sul tema "Metodologie di Indagine via Internet"

2015 - 2016

Nuove tematiche

- Comportamento del consumatore – *positioning* dei dispositivi mobili e localizzazione del turista
- Analisi delle preferenze temporali dei turisti nella prenotazione della vacanza

Eventi

- "Consumer Behaviour in Tourism Symposium" (CBTS, Simposio sul comportamento dei turisti)
- Seminario sull'Economia del turismo
- Convegno annuale della Società Italiana di Marketing

Financial Markets and Regulation (M. Murgia)

Tematiche

Il *cluster* Mercati Finanziari e Regolamentazione include le aree contabilità, finanza e diritto economico, all'interno delle quali saranno individuati specifici filoni di ricerca. Tuttavia, un tema di interesse comune per i membri del cluster è la *corporate governance*. La ricerca su questo tema si occupa principalmente di come imprese e istituzioni siano gestiti secondo gli interessi a lungo termine dei propri *stakeholders* (investitori, amministratori, dipendenti, clienti, fornitori, ecc.). A tal fine, i vari progetti di ricerca in cantiere testimoniano un comune impegno volto ad analizzare questioni di *corporate governance* da prospettive disciplinari diverse:

- Applicazioni e ottimizzazione delle funzioni di *asset allocation* (ripartizione del patrimonio) e *asset-liability management* (gestione integrata attivo e passivo)
- Contratti *Capital Markets*
- Diritto e Finanza delle offerte secondarie italiane
- Aspetti giuridici ed effetti competitivi di azioni volontarie di *delisting* a livello europeo
- Impatto della crisi finanziaria su modelli economici e prestazioni degli istituti bancari esteri
- Azionisti di controllo e *corporate governance*
- Formazione del prezzo e *pledgeable securities*
- Pratiche di diffusione del capitale intellettuale e relativi effetti sul costo del capitale privato: i casi di Italia e Regno Unito
- Comportamento degli analisti finanziari in presenza di *earnings management*

Risultati attesi nel prossimo triennio

Working papers, capitoli in volumi collettanei o saggi per la pubblicazione in riviste scientifiche internazionali. L'ulteriore divulgazione dei risultati ottenuti sarà raggiunta grazie alla partecipazione a convegni, conferenze e seminari internazionali.

Eventi

Organizzazione di seminari e conferenze su alcuni dei temi proposti nei progetti portati a termine.

2014

Tematiche

- Modelli economici e teoria finanziaria, p. es. per generare scenari finanziari
- Responsabilità da prospetto nelle *IPO* (offerte pubbliche iniziali) italiane
- Produttività di istituti bancari stranieri
- Dinamica dei costi delle operazioni di *trading* ed effetti sulla liquidità nei mercati elettronici dei blocchi
- Programmi di clemenza nella disciplina antitrust
- Finanziare nuove imprese con capitali di rischio di multinazionali: casi europei
- Costi e benefici dell'adozione dei principi contabili internazionali *IFRS* da parte delle PMI: il caso dell'Italia

Eventi

Organizzazione di un seminario in collaborazione con il *Journal of Financial Reporting*

2015 - 2016

Tematiche

- Modelli teorici e *agent-based* per i mercati finanziari, p. es. analisi delle prestazioni di diversi analisti finanziari che ricevono errori correlati
- Diritto e Finanza di operazioni di *listing cross-border* in Europa
- Analisi delle politiche sanzionatorie ECA e della loro efficacia
- Modifica della contabilizzazione del *leasing* e relativi effetti sui bilanci aziendali



Law, Economics and Institutions (S. Baroncelli)

L'obiettivo per i prossimi tre anni consiste in quanto segue: sviluppare progetti di ricerca già approvati, stabilire sinergie tra i ricercatori del *cluster*, partecipare a convegni e seminari, generare reti in collaborazione con ricercatori di altre università e istituti di ricerca (p. es. entrando a far parte dei comitati editoriali di riviste e serie scientifiche). Intendiamo inoltre organizzare convegni che coinvolgano enti locali e professionisti attivi sul territorio (p. es. funzionari pubblici, Camera di Commercio, Ordine degli Avvocati, Ordine dei Dottori Commercialisti, ecc.).

Tematiche per il prossimo triennio

Nell'ambito dei progetti di ricerca già approvati saranno trattati i seguenti temi:

- Economia e Futuro
- Le conseguenze dell'appartenenza all'Unione Europea per l'autonomia dell'Alto Adige: analisi di alcune funzioni legislative e amministrative
- Diritto contrattuale europeo, Diritto del consumatore, diritti contrattuali e diritti fondamentali

Saranno avviati nuovi progetti sui seguenti temi

- Limiti della globalizzazione e diritti fondamentali
- Teoria della regolamentazione e contratto
- Federalismo fiscale, *governance* e sostenibilità nel quadro dell'Unione Europea
- L'Unione Bancaria europea e le sue conseguenze per gli assetti nazionali
- Le conseguenze dell'appartenenza all'Unione Europea per l'autonomia dell'Alto Adige: analisi di alcune funzioni legislative e amministrative
- La lingua come fattore di integrazione sociale e politica
- Il quadro etico, normativo, politico e naturale della vita economica
- "Tendenze disgregative nell'Unione Europea" – Il nuovo diritto di recesso dalla UE

Risultati attesi nel prossimo triennio

Pubblicazione di volumi collettanei, saggi in riviste scientifiche italiane e internazionali, in versione cartacea ed elettronica, monografie. È prevista la pubblicazione nelle lingue italiana, inglese e tedesca.

Eventi

- Convegno internazionale sul tema "Economia e Futuro"
- Seminario sul tema "Le conseguenze dell'appartenenza all'Unione Europea per l'autonomia dell'Alto Adige"
- Convegno sul tema "Formazione e Attuazione della Normativa UE"

Nel prossimi tre anni, intendiamo inoltre organizzare convegni che coinvolgano enti locali e professionisti attivi sul territorio (p. es. funzionari pubblici, Camera di Commercio, Ordine degli Avvocati, Ordine dei Dottori Commercialisti, ecc.).

2014

Tematiche

Nel 2014 saranno portati avanti i progetti avviati nel 2013

- "Tendenze disgregative nell'Unione Europea" – Il nuovo diritto di recesso dalla UE

Eventi

- Convegno sul tema "Pareggio di bilancio e Unione Europea"
- Seminario sul tema "Le ragioni del progetto di una UE più ampia"
- Due ulteriori seminari su temi da stabilire



2015 - 2016

Tematiche

Nel 2015 saranno portati avanti i progetti avviati nel 2013 e continuati nel 2014

Eventi

- Convegno sul tema "La lingua come fattore di integrazione sociale e politica"
- Seminario sul tema "Federalismo fiscale e *governance* europea"

Quantitative methods and economic modelling (F. Durante)

Tematiche

- Crescita economica e disoccupazione
- Crescita economica e cambiamento strutturale
- Modelli di dipendenza per lo studio di sistemi economici e mercati finanziari
- Modelli di analisi del comportamento elettorale di una commissione di esperti in ambito finanziario (come alternativa ai modelli esistenti basati sull'indipendenza del voto)
- Ottimizzazione in finanza (*asset allocation, asset-liability management*)

Risultati attesi (per ciascuno dei prossimi tre anni)

- Divulgazione dei risultati presso la comunità scientifica (pubblicazioni in riviste indicizzate ISI/SCOPUS, pubblicazioni in volumi e/o atti di convegni con collocazione editoriale internazionale, presentazione dei risultati in consessi scientifici internazionali)
- Divulgazione dei risultati presso un pubblico più ampio, tanto a livello locale e regionale quanto a livello nazionale ed europeo (articoli e comunicati stampa, interviste radiofoniche, ecc.), prestando particolare attenzione alle implicazioni sociali dei fenomeni economici
- Applicazione dei modelli sviluppati a favore della comunità locale in termini di una nuova conoscenza dei fenomeni economici regionali (con possibili implicazioni di carattere politico)

Eventi programmati

Organizzazione dei seguenti eventi scientifici presso la Libera Università di Bolzano:

- Seminario della durata di un giorno sul tema "Generare Scenari per l'Ottimizzazione Finanziaria"
- Seminario della durata di un giorno sul tema "Metodi Quantitativi per la Valutazione della Ricerca"

2014

Tematiche

- Interconnessione e modelli di rete per economia, finanza e sistemi regionali
- Convergenza economica
- Modelli economici per problemi finanziari (p. es. generazione di scenari mediante strutture ad albero)
- Conseguenze macroeconomiche dell'indebitamento
- Modelli per le variabili nascoste (p. es. cicli economici e modelli ciclici) che controllano dinamiche finanziarie interdipendenti

Eventi programmati

Organizzazione dei seguenti eventi scientifici presso la Libera Università di Bolzano:

- Seminario della durata di un giorno sul tema "Modelli di Dipendenza in Economia e Finanza"

2015 - 2016

Tematiche

- Indebitamento e disoccupazione
- Dinamiche industriali dipendenti in un'economia decentrata
- Strumenti e metodi econometrici e statistici per la previsione applicati all'inflazione



- Metodi quantitativi di gestione del rischio
- Il turismo come fattore di crescita economica

Eventi programmati

- Organizzazione dei seguenti eventi scientifici presso la Libera Università di Bolzano:
- Seminario della durata di un giorno sul tema "Rischio in Economia e Finanza"
- Convegno internazionale sul tema "Avanzamenti nelle Dinamiche Macroeconomiche" (4-5 giorni)

3.3.4 INVESTIMENTI

3.3.4.1 Settore didattico

Non sono state fatte richieste di investimenti.

3.3.4.2 Settore ricerca

Non sono state fatte richieste di investimenti.



3.4 FACOLTÀ DI SCIENZE DELLA FORMAZIONE

3.4.1 DIDATTICA

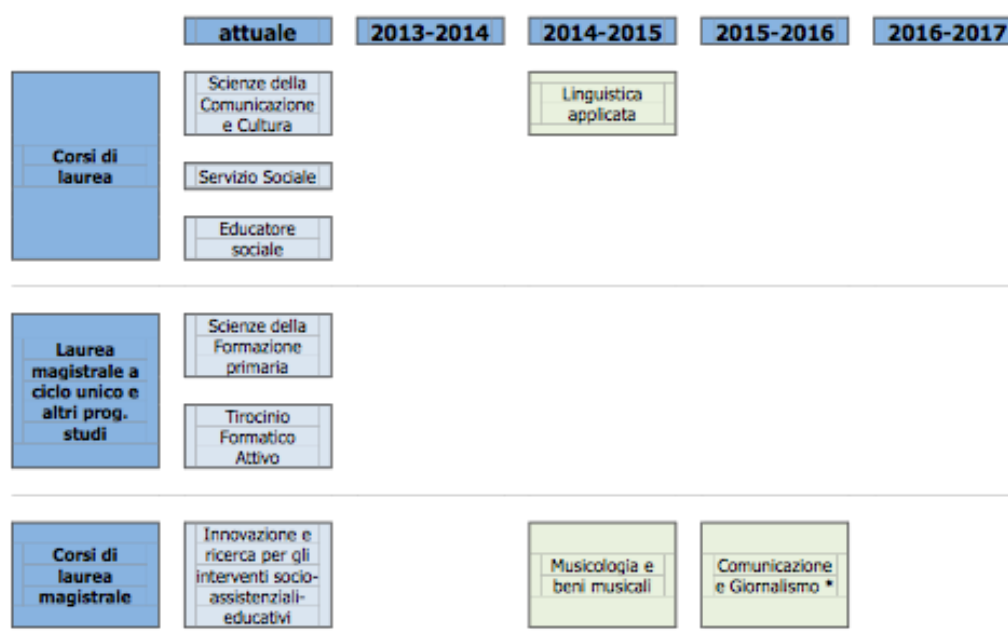
Alla Facoltà di Scienze della Formazione sono attualmente attivi tre corsi di laurea, due corsi di laurea magistrale, un corso di laurea a ciclo unico, un corso di formazione universitaria, e un dottorato di ricerca. L'attuale offerta didattica comprende quindi tutti e tre i livelli di studio. Per l'anno accademico 2014/2015 la Facoltà intende attivare il corso di laurea in *Linguistica applicata* e il corso di laurea magistrale in *Musicologia e beni culturali*; nell'anno accademico 2015/2016 si prevede anche l'attivazione di un corso di laurea magistrale in *Comunicazione e Giornalismo* in collaborazione con alcune università estere.

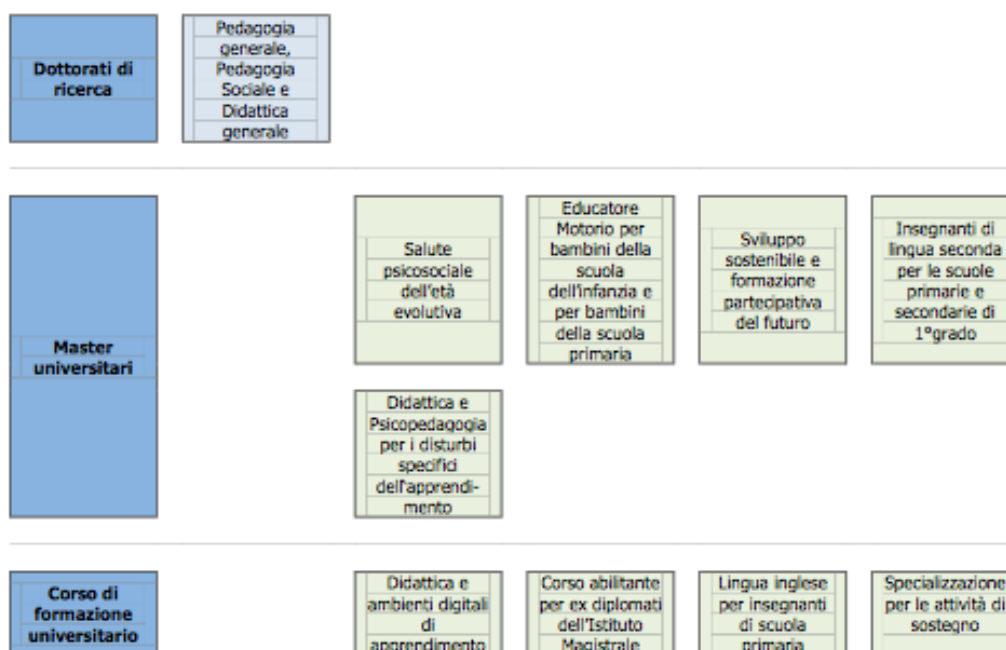
L'attivazione definitiva dei nuovi corsi di studio dipende dall'esito del rilevamento del fabbisogno, che verrà elaborata in collaborazione con l'IRE della Camera di Commercio di Bolzano.

La sede di Bressanone offre inoltre un'ampia gamma di corsi di studio professionalizzanti nelle scienze pedagogiche, sociali e della comunicazione. Accanto ai Master di primo livello, verranno sviluppati Master universitari e corsi di formazione universitaria per insegnanti e per le professioni sociali a seconda del fabbisogno emerso.

Ogni anno verranno proposte circa due nuove offerte formative, la cui priorità verrà definita in accordo con le tre intendenze scolastiche e le organizzazioni sociali.

La seguente rappresentazione grafica illustra lo sviluppo dell'offerta didattica presso la Facoltà:





*Joint Degree

3.4.2 PERSONALE

3.4.2.1 Situazione attuale

Al 1 gennaio 2013 risultano impiegati alla Facoltà di Scienze della Formazione 39 professori e ricercatori di ruolo, e 14 ricercatori a tempo determinato.

La seguente tabella indica la suddivisione dei 39 professori e ricercatori di ruolo nei diversi settori scientifico-disciplinari.

Area	S.S.D.	Prof. I fascia	Prof. II fascia	Ricercatori	Totale
Area 01 - Scienze matematiche e informatiche	INF/01			1	1
	IUS/09			1	1
Area 12 - Scienze giuridiche	IUS/17			1	1
	Totale			2	2

	L-ART/07	1		1	2
Area 10 - Scienze dell'antichità, filologico-letterarie e storico-artistiche	L-FIL-LET/09		1		1
	L-LIN/01	1	1	2	4
	L-LIN/12			1	1
	L-LIN/14	2		2	4
	Totale	4	2	6	12
Area 11 - Scienze storiche, filosofiche, pedagogiche e psicologiche	M-DEA/01		1		1
	M-PED/01	3	3	3	9
	M-PED/03	1	1	4	6
	M-PSI/01		1	1	2
	M-PSI/04	1			1
	Totale	5	6	8	19
Area 13 - Scienze economiche e statistiche	SECS-S/05	0	1	0	1
Area 14 - Scienze politiche e sociali	SPS/07		1	1	2
	SPS/08	2			2
	Totale	2	1	1	4
Totale		11	10	18	39

La seguente tabella illustra invece la suddivisione dei 14 ricercatori a tempo determinato nei settori scientifico-disciplinari.

Area	S.S.D.	RTD
Area 10 - Scienze dell'antichità, filologico-letterarie e storico-artistiche	L-ART/07	1
	L-FIL-LET/09	1
	L-LIN/01	1
	L-LIN/13	1
	L-LIN/14	1
	Totale	5
Area 11 - Scienze storiche, filosofiche, pedagogiche e psicologiche	M-DEA/01	1
	M-PED/01	2
	M-PED/04	2
	M-PSI/05	1
	M-PSI/08	1
	Totale	7



Area 13 - Scienze economiche e statistiche	SECS-P/06	1
Area 14 - Scienze politiche e sociali	SPS/08	1
Totale		14

3.4.2.2 Sviluppo

Nella pianificazione del reclutamento la Facoltà segue da una parte la strategia dell'internazionalizzazione del corpo docente attraverso le chiamate dall'estero, dall'altra la via a professori e ricercatori interni qualificati di una possibile carriera interna.

La seguente tabella illustra le assunzioni pianificate per i prossimi anni:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
Prof. I fascia	EDF/01		1		1
	ICAR/17	1			1
	L-LIN/13	1			1
	MAT/04		1		1
	M-PED/03	1			1
	SPS/04	1			1
	Totale	4	2	0	6
Prof. II fascia	L-ART/07		1		1
	L-LIN/12	1			1
	MAT/04	1			1
	M-DEA			1	1
	M-PED/03	1			1
	M-PSI/04			1	1
	Totale	3	1	2	6
Totale		7	3	2	12



La seguente tabella illustra le assunzioni previste di ricercatori a tempo determinato:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
RTD	L-ART/07		1		1
	L-LIN/02	1			1
	MAT/04		2		2
	M-EDF/01	1			1
	M-PSI/04	1			1
	SECS-P/05		1		1
	SPS/08		1		1
	Non definito			1	1
Totale		3	5	1	9

Per quanto concerne la carriera interna, sono previste complessivamente 7 posizioni per il passaggio da professore di II fascia a professore di I fascia nonché di ricercatore o ricercatore a tempo determinato (tipo B) a professore di II fascia. Presupposto per l'avanzamento è il conseguimento dell'abilitazione nazionale, nonché il raggiungimento degli obiettivi scientifici (pubblicazioni, ricerca, didattica e compiti istituzionali).



3.4.3 RICERCA

Lo sviluppo delle attività di ricerca si muove nel rispetto del trilinguismo e nello sviluppo delle reti scientifiche internazionali (tra cui l'Università dell'Euregio).

Segue una breve descrizione dei 4 punti chiave della ricerca:

Processi/progetti educativi e di sviluppo nelle differenti età e contesti di vita (*L. Dozza*)

I progetti in corso riguardano sia l'ambito più propriamente applicativo (dal contesto classe e scuola allo sviluppo di comunità) sia quello teoretico e storico-comparativo. All'interno della prima macro-area si sono costituiti gruppi di ricerca d'area con la finalità di rafforzare la ricerca e la circolarità tra ricerca e didattica individuando settori e focus di ricerca condivisi. Sono stati individuati sette settori di ricerca

- Ricerca teoretica di pedagogia, didattica, psicologia (e scienze dell'educazione).
- Sviluppo di qualità nei servizi educativi e innovazioni pedagogico-didattiche.
- Approcci teorico-metodologici, ambienti e contesti per lo sviluppo dell'apprendimento continuo.
- Didattiche disciplinari.
- Interdisciplinarietà didattica.
- Strutture, dinamiche e processi di gruppo e di rete per la co-costruzione di capitale umano e sociale e per una cittadinanza attiva e solidale.
- Conoscenza, integrazione, inclusione e valorizzazione delle diversità personali e culturali.

Le scelte e i processi indicati saranno oggetto di riesame annuale e di un relativo piano di miglioramento (AVA).

Obiettivi

- Rafforzare la copertura di settori strategici per la Facoltà in sinergia con la rete dell'Euregio nei settori delle didattiche disciplinari; della pedagogia, didattica, psicologia e scienze dell'educazione.
- Rafforzare la copertura di settori strategici per la Facoltà in sinergia con la rete dell'Euregio, tenendo conto del Rapporto di riesame annuale (AVA) nei settori delle didattiche disciplinari; della pedagogia, didattica, psicologia e scienze dell'educazione.
- Rafforzare collaborazioni di ricerca, scambi e mobilità a livello internazionale.
- Iniziative di disseminazione.
- Incremento pubblicazioni di peso internazionale e di pregio nazionale.
- Ricaduta sulla didattica e/o attinenza all'offerta formativa.
- Impatto sul territorio.

Lingue e linguaggi per una società multiculturale e plurilingue (*R. Franceschini*)

Questa macroarea di ricerca si studia lo sviluppo di lingue e linguaggi in differenti contesti storici e culturali. Si pongono, dunque, questioni relative a: linguaggi artistici e musicali, linguaggi e forme comunicative con particolare riferimento al contatto tra le lingue, alle varietà linguistiche e alla diversità linguistica; didattiche disciplinari; studio dei contesti socioculturali; ricerche su curricula formativi orientati alla promozione dell'espressività, del plurilinguismo e all'acquisizione di competenze comunicative e tecnologiche. Le attività di ricerca attinenti a questa area si caratterizzano per l'impianto trasversale volto a superare confini fra modalità di trasmissione di lingue, linguaggi e



sistemi semiotici più in generale, oltre che fra varietà di lingua o fra lingue diverse. I punti di forza sono nei rapporti parola-musica, parola-gesto, musica-immagine, scritto-parlato, lingua(e) standard-dialetto(i). Gli ambiti di intervento sono uno più propriamente applicativo nei confronti dei diversi contesti di apprendimento, e uno volto soprattutto alla documentazione del patrimonio linguistico e culturale del territorio.

In genere:

- Studio sui processi di acquisizione, di progressione e sull'uso linguistico in contesti plurilingui
- dimensione multimodale della comunicazione: aspetti fonico-acustici e prosodici; risorse semiotiche non verbali, rapporto tra musica e altre forme di comunicazione, *in primis* rispetto al linguaggio verbale.

Documentazione:

- Documentazione del patrimonio musicale, linguistico e sociolinguistico del territorio in chiave sia diacronica che sincronica.

Applicazione didattica (in collaborazione con la macro-area 1):

- Linguistica acquisizionale: studio delle abilità linguistiche e metalinguistiche, in particolare la scrittura e la riflessione grammaticale
- Esplorazione di metodologie sia di didattica della L1 che della L2, studi sul *testing*.

Ricerche specifiche sulla lingua ladina:

- documentazione e descrizione, in ottica sincronica e diacronica
- ricerche didattiche (elaborazione di un libro di testo)

In generale:

- Studio dei processi di acquisizione, progressione e uso linguistico in contesti plurilingui con particolare attenzione a contesti privati, istituzionali, lavorativi e formativi
- Focus sulla dimensione multimodale della comunicazione (aspetti fonetico-acustici e prosodici; risorse semiotiche non verbali) e sul rapporto tra musica e altre forme di comunicazione, *in primis* del linguaggio verbale

Documentazione:

- Documentazione del patrimonio musicale, linguistico e sociolinguistico del territorio in chiave sia diacronica che sincronica
- Interventi volti a favorire la fruibilità del lavoro di documentazione

Applicazione didattica (in collaborazione con la macro-area 1):

- Ricerca sull'apprendimento di abilità linguistiche e metalinguistiche, in particolare la scrittura e la riflessione grammaticale; implementazione di interventi
- Applicazione degli studi in campo fonetico-prosodico e multimodale, così come della ricerca su *corpora* in contesti didattici

Sviluppo di metodologie di *testing*.

Dinamiche sociali, coesione, cittadinanza e sistemi di solidarietà (S. Elsen)

Le ricerche in quest'area si concentrano sull'analisi di processi sociali, dei loro effetti e delle necessità di adattamento (in particolare di processi di modernizzazione), nonché sulla progettazione, basata sulla ricerca, sull'inizio, sull'accompagnamento e sulla valutazione di interventi finalizzati al cambiamento sociale pianificato (*planned change*). L'accento viene posto sulla promozione della cittadinanza attiva e l'incremento della partecipazione dei gruppi socialmente svantaggiati, la democratizzazione di tutti gli ambiti sociali e lo sviluppo ecosociale della società. I progetti di ricerca in corso e quelli pianificati si riferiscono a persone singole, gruppi, organizzazioni e la società e richiedono l'uso di metodi e strumenti partecipativi e attivanti, che si trovano anche nello spettro degli



approcci di ricerca e sviluppo sociale-ecologico, umano-ecologico, orientati al contesto socioculturale e familiare, etnografico e sociale.

La terza macroarea di ricerca si divide in quattro settori di ricerca delle scienze sociali e umane con differenti approcci, ma un comune sfondo di ricerca, il quale si rispecchia nei quesiti e setting di ricerca nonché nella consapevolezza dei ricercatori.

Settore 1: Sviluppo di qualità nei servizi sociali (Lorenz, Fargion, Nothdurfter, Frei)

Settore 2: Ricerca antropologica (Zinn, Tauber)

Settore 3: Ricerca sociale e problemi sociali (Riccioni)

Settore 4: Sviluppo sostenibile e ricerca partecipativa futura (Elsen, Salzer, Reifer, Vigano)

La crescente disoccupazione giovanile e povertà sono cruciali per il lavoro dei prossimi anni.

L'obiettivo nei prossimi anni è quello di sviluppare soprattutto nuovi approcci per un'esistenza autonoma nella terza età, servizi cooperativi di vicinato per la popolazione, sviluppo di nuovi campi d'azione nell'economia solidaristica nonché l'auto-aiuto assistito e l'autorappresentanza di persone con handicap.

Lo sviluppo di approcci per un'economia cooperativa e solidaristica e per uno sviluppo ecosociale mirato alla generazione di nuovi posti di lavoro, alla stabilizzazione di territori e allo sviluppo sostenibile, richiede una collaborazione interdisciplinare e trasversale.

Lo stesso vale per l'introduzione e l'affiancamento di processi di democratizzazione di organizzazioni in tutti gli ambiti sociali e di promozione della partecipazione, soprattutto di persone con difficoltà di esprimere le proprie esigenze e interessi.

Per la scelta di nuovi temi di ricerca e progetti ci si orienterà alle esigenze e potenzialità della svolta (paradigm shift), con ampie conseguenze per economia e società. Punto centrale sarà favorire il superamento delle nuove sfide a livello di singoli, gruppi e società. La questione dell'approccio ai beni comuni e la garanzia di esistenza minima incondizionata (reddito di base) assumerà importanza.

Centro di studi e documentazione sulla storia della formazione in Alto Adige (A. Augschöll)

Le attività di ricerca e di documentazione si basano sulla comprensione teorica della scuola come un "attore istituzionale" seguendo le teorie di Fend (2006). Al centro dell'interesse di ricerca è la genesi della scuola che si pone come una storia di regolativi con le loro intenzioni educative e i principi educativi al livello macro, come la storia istituzionale al livello meso, e come un fattore determinante per le biografie sull'educazione sulla vita e sul lavoro degli attori al livello micro (alunni e docenti).

Obiettivi per i prossimi tre anni:

Ambito della documentazione (in collaborazione con la Biblioteca Universitaria): Il Centro diventerà un punto di riferimento per la ricerca storica sulla formazione nella provincia. Misure: sviluppo sistematico, espansione e conservazione di pertinenti risorse (database Oral History, database di immagini, la raccolta di libri di testo, quaderni, materiale didattico e mappe murali), messa in rete di centri di documentazione regionali, nazionali e internazionali;

Ambito della ricerca: lavorare argomenti regionali in progetti internazionali:

- "condizioni di vita, di apprendimento e di lavoro di alunni/alunne e di insegnanti in scuole di piccole dimensioni nel territorio alpino dell'Alto Adige, dei Grigioni e del Vallese" – focus sia storico che attuale; finanziamento: progetto Interreg (termina Set.2014)

- su invito diretto dal "Ministero dell'Istruzione, dell'Università e della Ricerca" elaborazione della storia della scuola Altoatesina (soprattutto della popolazione tedesca e ladina) per una mostra sulla Storia della scuola come parte storia dell'identità



-in programmazione: "Mappe murali didattiche e la loro immagine dell'uomo" in collaborazione con: Università di Würzburg, Museo sulla scuola di Rotterdam, Università di Padova e Università di Macerata

- Partnership con studenti universitari e classi di varie scuole: Processi di re-contestualizzazione di regolamenti scolastici e politici a partire dal livello macro fino al livello micro, della scuola in loco con le sue strutture e l'impatto sulla biografie dell'educazione dei singoli attori.

Focus della ricerca:

- Livello dell'alfabetizzazione nella madrelingua (tedesco) e nella lingua della scuola (italiano) di persone altoatesine, che hanno completato gli anni obbligatori di scuola durante l'era fascista
- 50 anni di scuola media in Alto Adige (convegno e pubblicazione dei risultati)

Focus della ricerca nel 2014:

- Scuola e guerra (100 anni dall'inizio della Prima Guerra Mondiale)
- La storia della scuola dell'infanzia in Alto Adige

Focus della ricerca nel 2015 - 2016:

- La storia dell'istruzione professionale in Alto Adige
- Educazione formale e non-formale: competenze di vita acquistate in modo non formale di persone che hanno completato l'obbligo di istruzione negli anni 50

Ambito dell'inclusione della popolazione in attività concrete di ricerca e di documentazione: Il centro sarà l'interfaccia tra l'università e il pubblico attraverso iniziative mirate (ricerca sull'educazione come argomento adatto: la scuola fa parte della biografia di ciascuno)

3.4.4 INVESTIMENTI

3.4.4.1 Settore didattico

Non sono state fatte richieste di investimenti.

3.4.4.2 Settore ricerca

La Facoltà ritiene sia estremamente importante sviluppare ed attivare un laboratorio audiovisuale con funzioni di supporto alla didattica e alla ricerca, di audio e mediateca. I costi per l'allestimento di questo laboratorio ammontano a 300.000€.

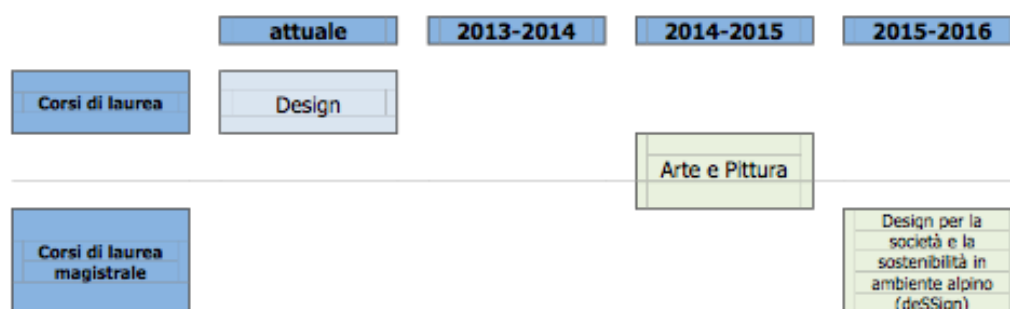


3.5 FACOLTÀ DI DESIGN E ARTI

3.5.1 DIDATTICA

Alla Facoltà di Design e Arti è attualmente attivo un corso di laurea. Nell'anno accademico 2014/2015 è prevista l'attivazione di un secondo corso di laurea o di un corso di laurea magistrale in *Arte e Pittura*. Per la Facoltà è altresì importante l'attivazione di un corso di laurea magistrale in *Design per la società e la sostenibilità nell'ambiente alpino*, pianificata per l'anno accademico 2015/2016. L'attivazione definitiva dei nuovi corsi di studio dipende dall'esito del rilevamento del fabbisogno, che verrà elaborato in collaborazione con l'IRE della Camera di Commercio di Bolzano.

La seguente rappresentazione grafica illustra lo sviluppo dell'offerta didattica alla Facoltà:



3.5.2 PERSONALE

3.5.2.1 Situazione attuale

Al 1 gennaio 2013 risultano impiegati alla Facoltà di Design e Arti 9 professori e ricercatori di ruolo e 6 ricercatori a tempo determinato.

La seguente tabella illustra la suddivisione del personale accademico di ruolo nei diversi settori scientifico-disciplinari:

Area	S.S.D.	Prof. I fascia	Prof. II fascia	Ricercatori	Totale
Area 08 – Ingegneria civile e Architettura	ICAR/13	1	5		6
	ICAR/16		1		1
	Totale	1	6	0	7



Area 10 – Scienze dell'antichit�, filologico-letterarie e storico-artistiche	L-ART/03	0	1	0	1
Area 11 – Scienze storiche, filosofiche, pedagogiche e psicologiche	M-FIL/05	1	0	0	1
Totale		2	7	0	9

La seguente tabella illustra invece la suddivisione dei ricercatori con contratto a tempo determinato nei diversi settori scientifico-disciplinari.

Area	S.S.D.	RTD
Area 08 – Ingegneria civile e Architettura	ICAR/17	1
Area 01 – Scienze matematiche e informatiche	INF/01	2
Area 09 – Ingegneria industriale e dell'informazione	ING-IND/16	2
Area 14 – Scienze politiche e sociali	SPS/08	1
Totale		6

3.5.2.2 Sviluppo

La strategia della Facolt  nel reclutamento consiste nell'assumere pi  personale di ruolo e contemporaneamente nel mantenere un certo contingente di professori incaricati nel settore scientifico-disciplinare ICAR/13, che permette un immediato contatto con l'esperienza professionale.

La seguente tabella illustra le assunzioni previste nei prossimi anni:

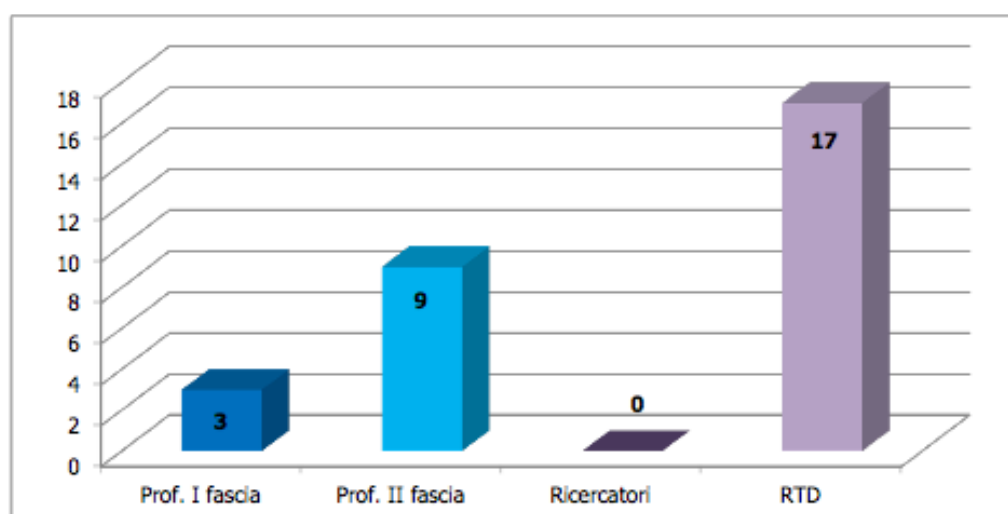
Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
Prof. I fascia	ICAR/13	1	0	0	1
	L-ART/06		1		1
Prof. II fascia	M-DEA/01		1		1
	Totale	0	2	0	2
Totale		1	2	0	3



La seguente tabella illustra invece le assunzioni previste di ricercatori a tempo determinato:

Qualifica	S.S.D.	2013 - 2014	2015	2016	Totale
RTD	ICAR/13	1			1
	ICAR/17	1	1		2
	INF/01	3	1		4
	ING-IND/22		1		1
	L-ART/06		1		1
	M-FIL/04		1		1
	SPS/08		1		1
Totale		5	6	0	11

Al termine del triennio la Facoltà presenta la seguente situazione:



Per quanto concerne la carriera interna, è prevista complessivamente 1 posizione per il passaggio da professore di II fascia a professore di I fascia nonché di ricercatore o ricercatore a tempo determinato (tipo B) a professore di II fascia. Presupposto è il conseguimento dell'abilitazione scientifica nazionale e la coerenza con le esigenze della Facoltà nella didattica e nella ricerca.



3.5.3 RICERCA

La ricerca attraverso il Design è prevalentemente ricerca applicata, che viene condotta in stretta collaborazione con l'economia, le istituzioni culturali e il settore pubblico. La ricerca per il Design e sugli oggetti e processi del Design viene gestita come ricerca di base teorico-storica, metodologica, estetica e fenomenologica. Questo approccio alla ricerca tuttavia non esclude la creazione e la sistematica costruzione di raccolte didattiche e tipologiche di beni culturali.

Segue una breve descrizione dei 3 punti chiave della ricerca:

Cultura visuale e il suo impatto sulla società (*A. Benincasa*)

L'ambito „Visual culture and its impact on society” indaga e ricerca quei fenomeni, processi e artefatti, che sono a contatto diretto o indiretto con le attività creative e progettuali del/della designer. Punto focale è soprattutto l'interazione tra le forze sociali ed il design, ovvero la questione del rapporto tra le dinamiche sociali e le attività creative e progettuali del/della designer. Comunicazione visiva, grafica, tipografia, nuovi media, l'immagine in movimento e quella ferma, così come il testo come mezzo di espressione sono i campi delle attività di ricerca. L'attenzione dei ricercatori è però rivolta soprattutto al/della designer stesso/a, alla sua motivazione e posizione sociale, al suo contesto culturale e in particolar modo alla sua capacità di riflettere sul proprio agire. Questo fa parte dell'ambito di „ricerca sul design”.

A tal fine si ricorda la convenzione con l'AIAP („Associazione Italiana Progettazione per la Comunicazione Visiva”).

Sviluppo previsto: Collaborazione con istituzioni locali, collaborazione con altre facoltà in particolare con la Facoltà di Formazione.

Fenomeni, processi e risultati del lavoro di progettazione tridimensionale (*R. Gigliotti*)

Al centro del progetto di ricerca vi è il design di prodotto. Vengono studiati fenomeni, processi e artefatti nonché la loro connessione nell'impiego ed utilizzo degli stessi.

Si tratta dello sviluppo, analisi e sperimentazione di processi, materiali e procedure legate alla produzione nonché dell'analisi, sviluppo e sperimentazione di bozze di progetti tridimensionali e della loro realizzazione.

Al fine di ottimizzare le possibilità di utilizzo degli stessi vengono fatte ricerche sia di carattere sperimentale sia analisi sulla tecnologia e sulla semantica dei materiali impiegati.

L'attività progettuale viene intesa come una attività di ricerca a sé stante che deve analizzare ed elaborare in modo critico e permanente i processi di sviluppo del mondo dei materiali e degli artefatti. Questo approccio legato ad una progettazione sostenibile e di rilevanza sociale costituisce una parte sostanziale di questo ambito di ricerca.

In tale settore si sovrappongono la ricerca applicata e la ricerca di base.

A tal fine si ricorda la convenzione con ADI (Associazione per il Disegno Industriale)

Sviluppo previsto: Organizzazione e ampliamento dell'officina dei materiali della Facoltà in base ai risultati del progetto di ricerca „Interdisziplinäres Forschungszentrum Design”.



FREIE UNIVERSITÄT BOZEN
LIBERA UNIVERSITÀ DI BOLZANO
UNIVERSITÀ LJUBLJANA

Teorie, forme e linguaggi del Design (G. Glüher)

L'ambito di "Teorie, forme e linguaggi del Design" analizza teorie, metodologie, obiettivi e pratiche del creare progettuale dal punto di vista degli aspetti comunicativi. Fanno altresì parte le indagini sulla semiotica, fenomenologia, antropologia, filosofia et arte. Questa è intesa come critica di base e quindi come critica di tutti i processi immanenti al design e delle sue implicazioni per quanto riguarda la teoria della percezione. Punto centrale è un'analisi critica di tutti i rilevanti approcci di pensiero e operativi del design, della creatività e dell'estetica in considerazione della crescente importanza del design come mezzo di trasmissione di valori democratici, umanistici ed etici. Questo ambito abbraccia progetti di ricerca interdisciplinari, con lo scopo di delineare gli ancora giovani studi sul design. La cultura progettuale si incentra su discipline quali musica, arte, filosofia, letteratura, architettura, ingegneria, scienza e tecnologia. Definiamo questo lavoro transdisciplinare „lavoro sul e per il design“. Sviluppo previsto per la teoria: Consolidamento della riflessione teorica sulle macroaree di ricerca 1) e 2), in particolare prevista l'analisi dei settori di rilevanza sociale del design, semantica dei materiali, filosofia e teoria delle forme di comunicazione e della produzione di artefatti. Collaborazione con le altre facoltà (Facoltà di Scienze e Tecnologie, Informatica, Scienze della Formazione).

Arte e Pittura (n.d.)

Con riferimento a questa macroarea di ricerca, la facoltà nominerà un referente dopo l'approvazione del corso di studi (Laurea o Laurea magistrale) e successivamente inizieranno le relative attività di ricerca.

3.5.4 INVESTIMENTI

3.5.4.1 Settore didattico

La Facoltà necessita di un laboratorio elettronico (analogico e digitale) da gestire in collaborazione con la Facoltà di Scienze e Tecnologie informatiche. Per il Design di prodotti, interfacce, display e spazi, il lavoro con l'elettronica, ovvero la connessione tra Software e Hardware svolge un ruolo importante. Con il laboratorio elettronico questa lacuna verrebbe colmata. L'acquisto prevede costi pari a circa 20.000€.

Serviranno 2 fotolaboratori mobili (Trolley da noleggiare) i cui costi ammontano approssimativamente a 2.500€.

La Facoltà necessita inoltre di attrezzatura per l'officina forme e gessi per completare e realizzare la stessa. I costi ammontano a circa 25.000€.

3.5.4.2 Settore ricerca

Vedi gli investimenti del settore didattico



Segue un dettaglio dei costi e delle entrate nel periodo 2014-2016.

Budget di base 2014-2016

	2014	2015	2016
Organi istituzionali	712.000	712.000	712.000
Personale docente e ricercatore di ruolo	14.858.000	14.858.000	14.858.000
Ricercatori a tempo determinato	5.980.000	5.980.000	5.980.000
Docenti a contratto	7.754.000	7.202.000	7.052.000
Dottorati di ricerca	2.107.000	2.261.000	2.415.000
Spese per attività delle facoltà, biblioteca, centri di servizio	4.593.000	4.593.000	4.593.000
Spese generali e di gestione	5.799.000	5.832.000	5.865.000
Spese personale tecnico-amministrativo	11.898.000	12.043.000	12.193.000
IRAP	2.678.000	2.652.000	2.652.000
Investimenti	1.387.000	1.357.000	1.357.000
Ricerca finanziata da terzi	2.364.000	2.483.000	2.607.000
<i>sub totale uscite</i>	<i>60.130.000</i>	<i>59.973.000</i>	<i>60.284.000</i>
adeguamento all'inflazione 2,5% (uscite-ricerca finanziata)	1.444.000	1.473.000	1.515.000
(A) Uscite complessive	61.574.000	61.446.000	61.799.000
Contribuzione studentesca	3.405.000	3.375.000	3.225.000
Ricavi per prestazione di servizi e ricavi vari	570.000	598.000	626.000
Contributi da altri enti	400.000	400.000	400.000
Ricavi per ricerca finanziata da terzi	2.364.000	2.483.000	2.607.000
Entrate proprie	6.739.000	6.856.000	6.858.000
Avanzi anni precedenti	5.000.000	0	0
(B) Entrate complessive	11.739.000	6.856.000	6.858.000
(C) Contributo Provinciale budget di base (A-B)	49.835.000	54.590.000	54.941.000

Budget delle prestazioni 2014-2016

	2014	2015	2016
Facoltà di Scienze e Tecnologie	338.000	1.145.000	2.094.000
Facoltà di Scienze e Tecnologie informatiche	0	124.000	513.000
Facoltà di Economia	501.000	1.210.000	1.767.000
Facoltà di Scienze della Formazione	280.000	1.003.000	1.655.000
Facoltà di Design e Arti	395.000	1.134.000	1.764.000
Corsi di formazione	0	0	1.000.000
(D) Budget totale per lo sviluppo delle Facoltà	1.514.000	4.616.000	8.793.000
Centro di competenza Lingue	155.000	166.000	172.000
Centro di competenza Storia regionale	277.000	277.000	277.000
Centro di competenza Sicurezza e prevenzione dei rischi	333.000	333.000	333.000
(E) Budget totale per lo sviluppo di centri di competenza	765.000	776.000	782.000
Investimenti per laboratori delle facoltà	1.116.000	1.116.000	1.050.000
Fondo per la ricerca	1.500.000	1.500.000	1.500.000
Premio per l'attività accademica	0	500.000	723.000
Spese di gestione e manutenzione per nuovi palazzi	209.000	282.000	285.000
(F) Budget totale per investimenti in laboratori/edifici, ricerca di base, premio	2.825.000	3.398.000	3.558.000
(G) Fondo per nuove iniziative, modifiche normative	250.000	1.800.000	7.400.000
(H) Contribuzione studentesca per nuova offerta formativa	33.000	227.000	521.000
(I) Contributo Provinciale budget delle prestazioni (D+E+F+G-H)	5.321.000	10.363.000	20.012.000
Contributo Provinciale complessivo (C+I)	55.156.000	64.953.000	74.953.000
<i>Budget da Convenzione programmatico-finanziaria con la Provincia Autonoma di Bolzano</i>	<i>55.000.000</i>	<i>65.000.000</i>	<i>75.000.000</i>